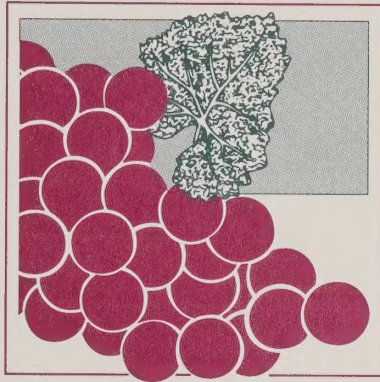




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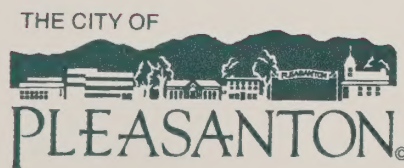
**Vineyard Avenue
Corridor**

SPECIFIC PLAN

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Department of Planning and Community Development
November 1998

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DRAFT VINEYARD AVENUE CORRIDOR SPECIFIC PLAN

Prepared by the
City of Pleasanton
Department of Planning and Community Development

November 1998

For more information regarding this document, please contact the Department of Planning and Community Development, 200 Old Bernal Avenue, P.O. Box 520, Pleasanton, California, 94566-0802; (925) 484-8023.



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I. INTRODUCTION

A. PLAN OVERVIEW

This Specific Plan is intended to serve as the primary land use and infrastructure regulatory guide for development of the 384-acre Vineyard Avenue Corridor area located along Vineyard Avenue in southeast Pleasanton. The purpose of the Plan is to establish a unique agricultural/residential environment which features a variety of agricultural, residential, open space, recreational, educational, and other uses. The Plan establishes the basic land use pattern, development and design standards, circulation network, infrastructure system, environmental protection, financing, and implementation requirements for future development.

The project-related environmental analysis for the Specific Plan is contained in a separate companion document entitled "Environmental Impact Report for the Vineyard Avenue Corridor Specific Plan." The Environmental Impact Report (EIR) includes an analysis of potentially significant project-related environmental impacts, measures for mitigating such impacts, and an analysis of project alternatives.

The Specific Plan and EIR were prepared concurrently by City staff and consultants. This process provided the opportunity for the environmental consultants to recommend mitigations for otherwise potentially significant environmental impacts which could then be incorporated directly into the Specific Plan. The result is what is called a "mitigated plan," or a specific plan which contains the environmental mitigations within its text. This approach has allowed for a more interactive exchange of information between the staff who prepared the Plan and the consultants who evaluated the environmental consequences of the Plan.

B. STATUTORY AUTHORITY

Under California law, cities and counties may use the specific plan process to develop policies, programs, and regulations for implementing their general plans in site-specific areas. A specific plan frequently serves as the bridge between the general plan and site development plans in this regard.

This Specific Plan was prepared consistent with the requirements of State planning and zoning law, and as such includes text and diagrams which specify the following:

1. The distribution, location, and extent of land uses, including open space, within the Plan Area;
2. The proposed distribution, location, extent, and intensity of major components of public and private transportation, water, sewage, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the Plan Area and needed to support the land uses described in the Plan;

3. Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources; and
4. A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the Plan.

C. SPECIFIC PLAN HISTORY

In 1992, upon request by a group of Vineyard Corridor property owners and recommendation by the Planning Commission, the City Council directed the Planning Department to prepare a specific plan for the Vineyard Corridor area. A cooperative planning effort was then initiated whereby City staff worked with City consultants and consultants representing the property owners through a series of neighborhood meetings to evolve an administrative draft plan. Then in May, 1993, the Council referred the planning work which had been completed to that point to the General Plan Steering Committee for consideration during the comprehensive General Plan Update which was just getting underway.

During the time that followed, a variety of land use and circulation alternatives were analyzed. Then, in August, 1996, the Council adopted the General Plan Update. The Land Use Element of the updated General Plan includes guidance for the planning of the Vineyard Corridor area which reads as follows:

"Due to the complexity of planning issues raised by the Vineyard Corridor, a specific plan should be prepared to coordinate land uses, densities, aesthetics, circulation, and infrastructure requirements. Future land use designations should consist of Agriculture and Grazing; Rural, Low, and Medium Density Residential; Parks and Recreation; and Commercial. Other possible uses should also be considered which relate to the outlying wine country, including 'country' restaurants, bed-and-breakfast inns, wineries, wine-tasting rooms, tourist information, art galleries, museums, bicycle rentals, etc. The specific plan should include a target of 150 housing units. An attractive gateway to the Livermore Valley wine country should be accomplished by developing Vineyard Avenue into a scenic road entry, preserving substantial open space, planting vineyards, and implementing a wine country architectural and landscape design theme throughout the Corridor."

In March, 1997, the Council directed staff to re-initiate work on the Specific Plan. The first step in this process was the preparation of a site economic and development feasibility analysis based upon the above General Plan guidance. City consultants subsequently completed this study which included several alternative land use/infrastructure concept plans. In January, 1998, the Council adopted a preferred concept plan which was used as the basis for developing this Specific Plan.

D. SPECIFIC PLAN PROCESS

Adoption of this Specific Plan requires the following governmental actions:

Circulation of project documents. The Draft Specific Plan along with an accompanying Planned Unit Development (PUD) rezoning application, and companion Draft Environmental Impact Report (DEIR) will be circulated for review and written comments by the public and governmental agencies for a period of 45 days.

Parks and Recreation Commission Review. During the 45-day public review period, the Pleasanton Parks and Recreation Commission will conduct a public hearing(s) to review and comment on the Draft Specific Plan with particular emphasis on the proposed community park and trails.

Planning Commission Hearing on the DEIR. During the 45-day public review period, the Pleasanton Planning Commission will conduct a hearing to receive oral comments on the DEIR.

Response to Comments. Following the close of the 45-day public review period, City staff and consultants will prepare and circulate a written response to all relevant written and oral comments received on the DEIR. This response, along with the DEIR, will together comprise the Final Environmental Impact Report (FEIR).

Further Planning Commission Review. The Planning Commission and other applicable City Commissions will next conduct formal public hearings to receive public comments on the Project and formulate recommendations to the City Council regarding the FEIR, Specific Plan, and PUD rezoning.

City Council Review. The City Council will then conduct a formal public hearing(s) to receive public comments and take final action on the FEIR, Specific Plan, and PUD rezoning.

E. PLAN ORGANIZATION

This Specific Plan is organized into the following chapters:

- I. An **Introduction** chapter which provides a Plan overview, presents the State statutory authority for preparing a specific plan, summarizes the Specific Plan history, and outlines the process for adopting the Plan.
- II. An **Executive Summary** chapter which summarizes the Specific Plan land use, circulation, and infrastructure components.

- III. A **Planning Area Context** chapter which describes the regional and local setting, parcelization and ownership, general site characteristics, and site constraints and opportunities for Project development.
- IV. A **Land Use** chapter which describes the land use plan, provides development standards and design guidelines for the various land use districts which comprise the Plan Area, provides measures for resolving potential agricultural/non-agricultural use conflicts, describes the requirements of an applicable agricultural mitigation fee, and presents standards for construction activities.
- V. A **Circulation** chapter which describes the existing and planned vehicular circulation and trail systems, and contains standards and design guidelines for street improvements and landscaping.
- VI. A **Public Facilities** chapter which describes the water, sanitary sewer, storm water drainage, gas and electric, telephone and cable television, emergency and personal wireless communications facilities, fire protection, and solid waste disposal programs for the Plan Area.
- VII. An **Environmental Protection** chapter which provides guidance for protecting wetlands, wildlife, heritage trees, and potential archaeological/historical resources.
- VIII. A **Financing and Implementation** chapter which presents a summary of public facility financing responsibilities and phasing required to implement the Specific Plan.
- IX. A **General Plan Relationship and Other Jurisdictional Policies and Regulations** chapter which discusses pertinent City and other agency plans, policies, and procedures relevant to the Specific Plan.

II. EXECUTIVE SUMMARY

The Specific Plan land use concept features a mix of single-family homes, vineyards, open space, community park, elementary school, possible "wine country" related commercial uses, and possible limited aggregate mining activities. The Plan is intended to facilitate the transition of land uses between the urbanized edge of Pleasanton to the west and the Ruby Hill development to the east. The design concept requires sensitive residential and community park design treatment to protect the natural environmental quality of hillside areas generally south of Vineyard Avenue, and the integration of "vineyard villages" (residential sub-neighborhoods) with vineyards and an elementary school generally north of Vineyard Avenue. Future development is planned to create an attractive visual entry to the Livermore Valley wine country, consistent with the traditions of "wine country" architecture, site planning, and landscape design. The protection of possible on-site and nearby aggregate mining activities is also an important objective of the Plan.

Vineyard Avenue is planned to be realigned to the north along the Arroyo del Valle. This route is intended to improve travel safety, serve as a "bypass road" from the central core of Plan Area development, and create a scenic amenity for motorists by providing views of the Arroyo on the north side and vineyards to the south.

New City water and sanitary sewer facilities are planned to be extended throughout the Plan Area. Cost-sharing of these and all other public facilities is proposed on a pro-rata share basis from all benefitting developers of land including the City for the community park, Pleasanton Unified School District for the elementary school, residential developers for new homes, and existing homeowners seeking connections to these services.

A summary of the land use characteristics of the Plan is presented in Table II-1. The Specific Plan Land Use Plan is illustrated in Figure IV-1.

**Table II-1
Land Use Summary**

Location	Planned Land Use	Acreage	Existing Homes	Planned New Homes
Subarea 1 (Lots 1-17)	Residential	45	7	50
	Open Space	10	0	0
	Community Park	20	1	0
	Existing Streets	3	-	-
Subarea 2 (Lots 18-21, 32, 33)	Residential	25	3	68
	Open Space ⁽¹⁾	9	0	0
	Vineyards ⁽¹⁾	57	0	4
	Elementary School	12	0	0
	Existing Streets + Bypass Street	6	-	-
Subarea 3 (Lots 22-31)	Residential ⁽²⁾	49	8	66
	Open Space ⁽¹⁾	135	0	0
	Vineyards ⁽¹⁾	10	0	1
	Existing Streets	3	-	-
Total	-	384	19	189

⁽¹⁾ Bed-and-breakfast inns are conditionally permitted in place of housing units from adjacent on-site residential land at a ratio of two rooms per one home.

⁽²⁾ Option to develop a 100-room inn/spa/restaurant/conference facility and vineyard estate lot instead of housing and a vineyard estate lot on Lot 28.

III. PLANNING AREA CONTEXT

A. SITE LOCATION

The 384-acre Vineyard Corridor is located in the eastern portion of Pleasanton south of the Arroyo del Valle. The City of Livermore is located approximately one mile to the east. Figure III-1 illustrates the regional location of the Plan Area.

The site is generally situated adjacent to the existing urban edge of Pleasanton. Located directly to the north are the Arroyo del Valle, Shadow Cliffs Regional Recreation Area, and the RMC Lonestar quarry site. The Ruby Hill development abuts the eastern boundary of the Plan Area. To the south are Kottinger Hills and open space land owned by the Foley family. Abutting the western boundary of the Plan Area are the Vista Diablo, Victoria Meadows, Vintage Heights, Foxbrough Estates, and Grey Eagle Estates developments. Vineyard Avenue crosses the site in a generally east/west direction and provides primary access to existing lots on both sides of the street. A Plan Area vicinity map is presented in Figure III-2.

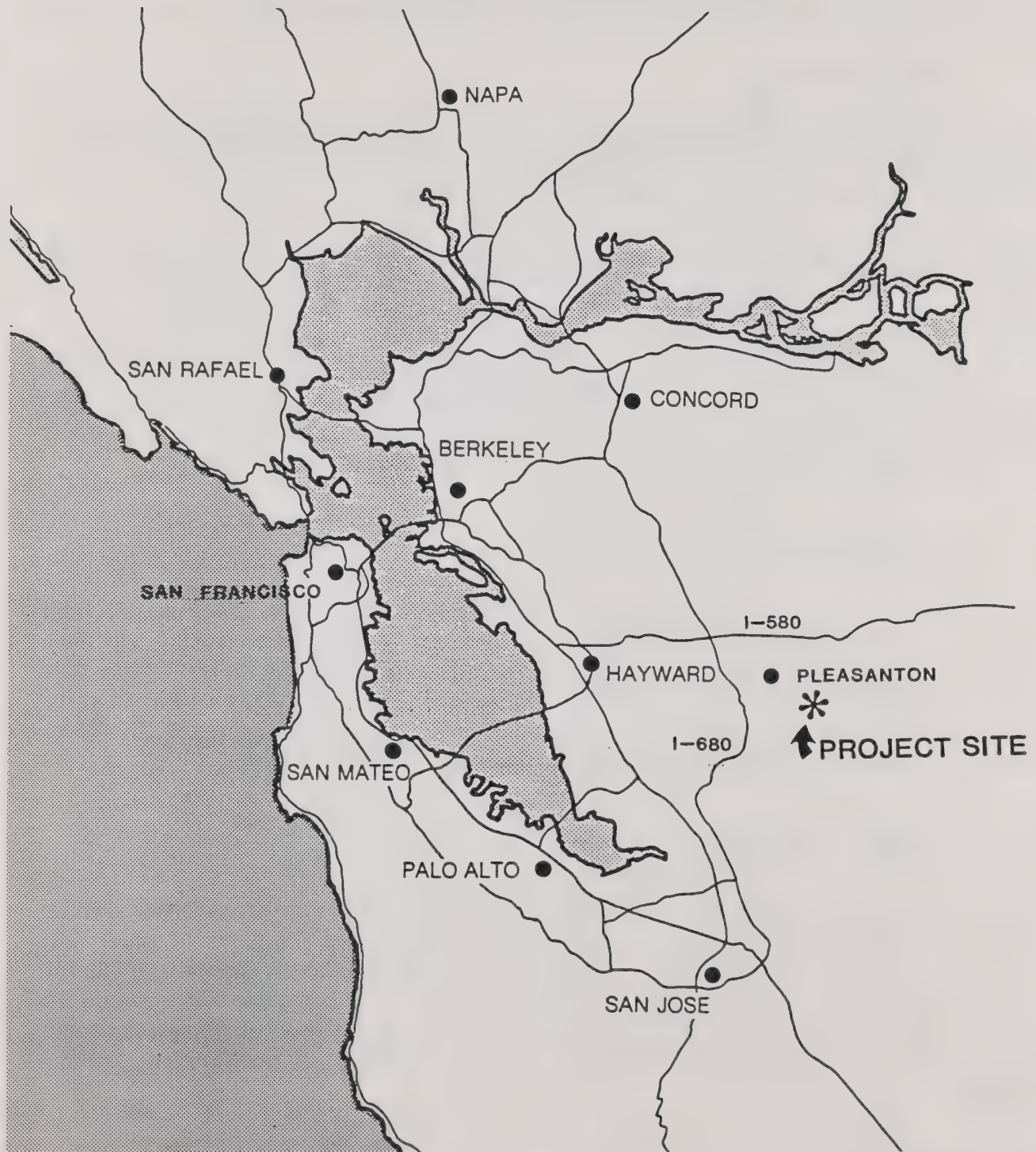
B. PARCELIZATION AND OWNERSHIP

The Plan Area is divided into 33 lots as shown on Figure III-3. Lots range in size from 0.9 acres (Lot 20) to 50 acres (Lot 22). Figure III-3 also divides the Plan Area into three subareas for describing the site characteristics and the land use plan later in this text. Table III-1 presents a listing of the Assessor's Parcel Number, acreage, owner, and address for each of the lots in the Plan Area. For the ease of identification, lots are numbered 1 through 33. These numbers are used in figures throughout this document for reference purposes.

C. GENERAL SITE CHARACTERISTICS

The irregularly-shaped 384-acre site is situated along both sides of Vineyard Avenue. Terrain is generally flat north of Vineyard Avenue but transitions to steep slopes on the south side. Elevations range from 383 feet above sea level on Lot 18 (adjacent to the Arroyo del Valle) to 700 feet at the southwest corner of the Plan Area on Lot 22. The entire site drains toward the Arroyo del Valle. The Plan Area is best characterized as a "rural residential" neighborhood. It is generally comprised of large lots with single-family homes and occasional agricultural buildings.

REGIONAL LOCATION MAP



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FIGURE III - 1



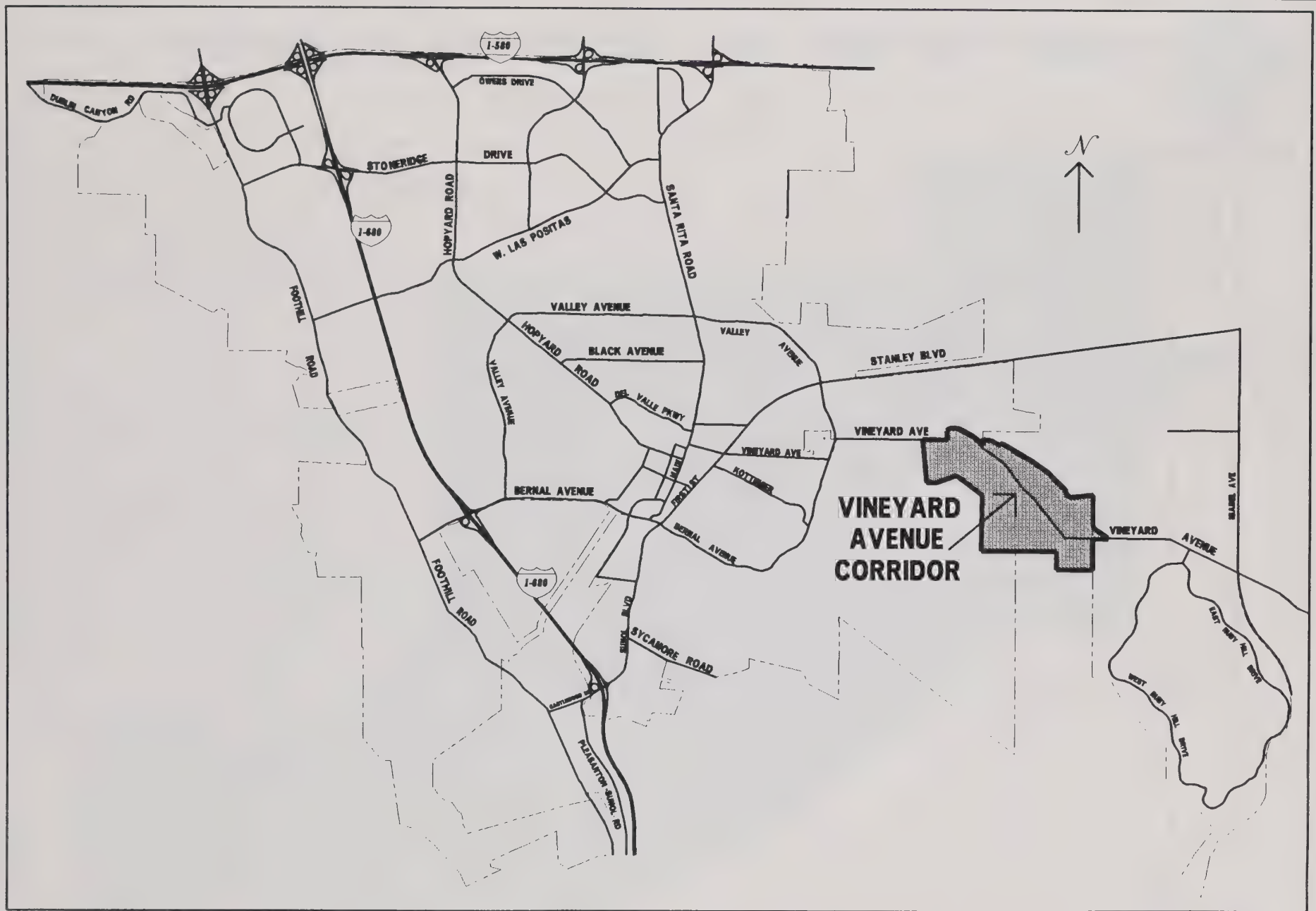


FIGURE III - 2

VINEYARD AVENUE CORRIDOR MAP



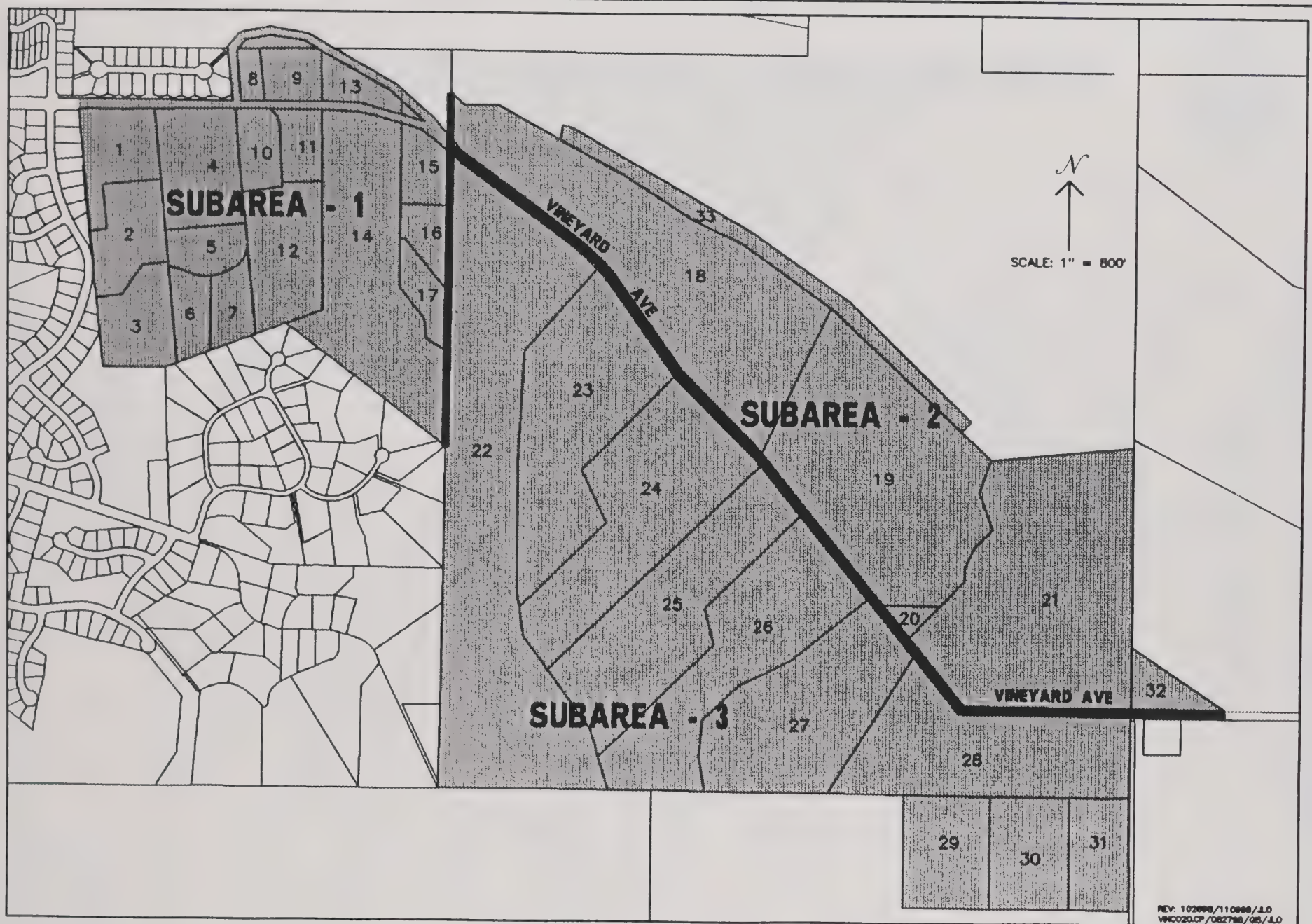


FIGURE III - 3

PROPERTY OWNERSHIP AND SUBAREA MAP



**Table III-1
Vineyard Avenue Corridor Parcel Ownership**

Lot Number	Assessor's Parcel Number	Acres	Owner	Address
1	946 1735 018 02	5.00	Kazuo & Takiko Hatsushi	2756 Vineyard Ave.
2	946 1735 019 00	5.02	Kazuo Hatsushi	2770 Vineyard Ave.
3	946 1735 020 00	5.02	Kazuo & Takiko Hatsushi	2798 Vineyard Ave.
4	946 1735 024 02	7.24	Lewis C. & Clara A. Nevis Trs.	2546 Vineyard Ave.
5	946 1735 023 00	2.66	Daryl A. & Ronald N. Halverson Trs.	751 Clara Lane
6	946 1735 022 00	2.45	A.F. & Janet Elgammal	865 Clara Lane
7	946 1735 021 00	2.49	Ronald N. & Marian M. Halverson	837 Clara Lane
8	946 1735 007 02	0.87	C.M. & Marie E. Allec Trs.	2538 Vineyard Ave.
9	946 1735 029 03	2.56	Don R. Hubbard	2756 Vineyard Ave.
10	946 1735 031 02	2.50	Lutz Homes	Vineyard Avenue
11	946 1735 030 00	2.30	Gary & Deborah Oetman et al.	Vineyard Avenue
12	946 1735 032 00	7.37	Brian K. & Shirley McGuire	Vineyard Avenue
13	946 1735 008 02	1.55	Molinaro	Vineyard Avenue
14	946 1735 008 03	20.51	Pleasanton Garbage Service, Inc.	Vineyard Avenue
15	946 1735 026 02	2.62	Anthony L. Pietronave	2500 Vineyard Ave.
16	946 1735 027 00	2.43	Michael W. & Linda M. Dominisse	Vineyard Avenue
17	946 1735 028 00	2.41	Dennis G. & L. Homer	Vineyard Avenue
18	946 1350 014 00	35.38	Wayne & Betty A. Hahner	2287 Vineyard Ave.
19	946 1350 013 00	33.30	Brian C. Lin	1689 Vineyard Ave.
20	946 1350 012 00	0.87	Douglas E. & Mary M. Safreno Trs.	1627 Vineyard Ave.
21	946 1350 011 00	29.84	RMC Lonestar	1465 Vineyard Ave.
22	946 1350 015 09	50.13	Frank Berlogar Tr.	2200 Vineyard Ave.
23	946 1350 015 08	20.00	Kenneth R. & Pamela L. Chrisman	1944 Vineyard Ave.
24	946 1350 015 07	20.00	Steve J. & Anabelle A. Brozosky	1700 Vineyard Ave.
25	946 1350 015 06	20.19	Kenneth E. Konig, Jr. Tr.	1680 Vineyard Ave.
26	946 1350 015 05	20.51	Ford G. & Mary L. Roberts	1666 Vineyard Ave.
27	946 1350 015 04	20.00	Michael J. Goodwin	1630 Vineyard Ave.
28	946 1350 015 03	21.30	Robert & Sharen Heinz Trs.	Vineyard Avenue
29	950 0005 005 00	7.70	Silver Bear	Vineyard Avenue
30	950 0005 006 00	7.11	Leonard R. Thibault	Vineyard Avenue
31	950 0005 004 00	5.50	Paul J. Fagliano	1364 Vineyard Ave.
32	950 0006 003 01	4.00 (portion)	Romarita M. Simoni Tr.	Vineyard Avenue
33	946 1350 009 09	3.00 (portion)	RMC Lonestar	1544 Stanley Blvd.
Existing Streets		9.00	City of Pleasanton	Vineyard Avenue

For the purpose of describing the site, the Planning Area has been divided into three subareas defined by land use, topography, and environmental characteristics as shown in Figure III-3. The following is a description of each subarea:

Subarea 1 contains Lots 1-17 and is located in the western portion of the Plan Area. It consists of relatively flat land immediately south of Vineyard Avenue with the terrain then sloping upward toward the south. This area is sparsely vegetated except for a stand of eucalyptus trees on Lots 8 and 9, and other scattered trees.

Subarea 1 contains 78 acres (20 percent of the Plan Area) and consists of semi-rural residential lots ranging in size from 0.9 to 20 acres. Many of the lots are five acres or less in size and contain a home. Lots 3, 9, 10, 11, 12, 13, and 17 are vacant. Lot 16 has a home that is under construction and is counted as a future home throughout this Plan. An existing private street (Clara Lane) provides access to several lots near the southern boundary of Subarea 1. The existing Hatsushi Nursery is located on Lot 1 and the front portion of Lot 2. Lot 14 contains the old Pleasanton landfill site. The landfill was closed in 1976, and the lot is currently vacant except for methane gas control facilities and a caretaker's residence and kennel.

Subarea 2 includes Lots 18-21, 32, and 33 and is located north of Vineyard Avenue. Lots 18, 19, and 21 are 30± acres in size. Lots 32 and 33 are small portions of larger lots within the unincorporated jurisdiction of Alameda County, and may require annexation to the City of Pleasanton in conjunction with development. Subarea 2 forms a plateau above the Arroyo del Valle and slopes gently toward the Arroyo. It consists primarily of grasslands, with a dominant stand of trees near the western end. It also contains two abandoned orchards. Three drainage courses traverse this area from south to north.

Subarea 2 contains 109 acres or 29 percent of the Plan Area. Lots 18 and 19 each contain a home and minor agricultural buildings. Lots 18, 19, and 21 are generally in limited agricultural use. Lot 21 is owned by RMC Lonestar which was granted a permit for gravel extraction and reclamation by Alameda County years prior to annexation of the parcel to the City of Pleasanton in 1992.

Subarea 3 includes Lots 22-31 and is located south of Vineyard Avenue. This subarea contains steeply sloping terrain which rises upward from Vineyard Avenue to the southern Plan Area boundary. Flatter areas are located along the hilltops and in the eastern portion of this subarea. Subarea 3 is traversed by three intermittent drainage courses, which are partially wooded. Vegetation generally consists of oak woodland in the valleys and grassland on the ridges and hilltops. The southern boundary forms a prominent ridge which acts as the visual backdrop for the Plan Area when viewed from outlying lands to the north.

This hilly subarea contains 197 acres or 51 percent of the Plan Area. It is characterized by individual homes located on hillside lots. Lots in this area generally average 20 acres in size and contain a single home. Most of the homes are accessed by long private driveways originating at Vineyard Avenue.

D. SITE CONSTRAINTS AND OPPORTUNITIES

A fundamental element of the Specific Plan preparation process was an analysis of the developmental constraints and opportunities created by the physical characteristics of the site. The Plan has evolved substantially in response to these. The following text summarizes the site characteristics that present constraints to the location and type of development that might occur in the Plan Area, as well as the opportunities for potential future development.

1. Constraints

The Plan Area is subject to a series of physical constraints which impact its developmental potential. These include the following:

- Property lines. The Plan Area is divided into 33 lots which may present difficulty for some owners wishing to develop independently and in a timely manner.
- Landfill. The old Pleasanton landfill is located on Lot 14. This facility was closed in 1976, but it still presents potentially major constraints to development relative to land settling and the removal of methane gas. These constraints limit the location, type, and density of potential land uses that might otherwise be developed on the site.
- Quarry noise, vibrations, and dust. The RMC Lonestar quarry operation is situated immediately north of the Plan Area. Noise, vibrations, and dust from this facility currently impact some properties within the Plan Area.
- Mining. Lots 21, 32, and 33 contain aggregate resources which are entitled to be mined pursuant to an Alameda County Mining Permit and an approved reclamation plan. This could negatively impact proposed on- and off-site land uses.
- Topography. South of Vineyard Avenue, the terrain varies from moderate to steep slopes which limit potential development.
- Wildlife habitat. Three partially vegetated stream channels extend in a northerly direction to the Arroyo del Valle which provide corridors for the movement of wildlife. Significant areas of oak woodland provide additional valuable wildlife habitat. Disruption of these areas by development could adversely impact wildlife.

- Vineyard Avenue. Vineyard Avenue is a rural road with difficult driveway intersection visibility. It was built in a cut-fill manner with a narrow road bed and contains vertical curves which are inappropriate for standard collector street design speeds. It also contains numerous active utility facilities along and beneath its surface.
- General off-site traffic impacts. Traffic generated by development of the Plan Area would impact Vineyard Avenue and the outlying City street system, including primarily the Bernal Avenue bridge at the Arroyo del Valle and the following street intersections: Bernal Avenue/Vineyard Avenue, Bernal Avenue/Stanley Boulevard, and Santa Rita Road/Valley Avenue. Cut-through traffic through nearby neighborhoods might also become a concern.
- Visual impacts. Development at higher on-site elevations could be clearly visible from various off-site locations, including the Vineyard Avenue section which fronts Ruby Hill, Stanley Boulevard, I-580, and neighboring properties to the west, southwest, and east of the Plan Area.
- Water service. Existing homes in the Plan Area are served by private wells. Any new development will require the provision of City water service. Due to the substantial site elevation changes (elevations 383 feet to 700 feet), the provision of domestic water to the higher elevations cannot be achieved through normal means.
- Sewer service. Existing homes in the Plan Area are served by private septic systems. Any new development will require the provision of City sanitary sewer service. Due to site elevations relative to existing off-site sewer facilities, some portions of the Plan Area cannot be served by gravity flow sewer lines.
- Fire hazard. Heavy vegetation and steep hillsides in Subarea 3 present a potential high fire hazard.
- Landslides. A geotechnical investigation conducted for the Plan Area has identified various landslides.

2. Opportunities

The Plan Area contains various physical characteristics which present opportunities for quality future development. These include the following:

- Site character. The rural character of the site and the outlying historic wine country can be used to create a unique design theme and development pattern for the Plan Area.

- Recreational Focus. The physical terrain of the Plan Area and the immediate proximity of the site to outlying open space, the Arroyo del Valle, and the Shadow Cliffs Regional Recreation Area provide an ideal setting for establishing a unique recreationally-oriented neighborhood community. Opportunities exist for creating an integrated system of open space; regional water recreation facilities; community park; school playfields; and local and regional hiking, biking, and equestrian trails.
- Productive soils. Past and present vineyards in and around the Plan Area and recent viticulture studies indicate that the soils and climate of the Plan Area are suitable for this type of agricultural use.
- Proximity to urban development. Because the Plan Area is located adjacent to the urban edge of Pleasanton, it can be efficiently served by public infrastructure and services.
- Potential realignment of Vineyard Avenue. Flat undeveloped land exists near the Arroyo del Valle which presents the potential for a safer, more functional, and more scenic alignment of Vineyard Avenue.
- Public facility site location potential. Suitably-located sites exist within the Plan Area which could be used for needed public facilities including a community park and elementary school to serve residents in and around the Plan Area.
- Open space. Substantial open space acreage consisting of ridgelines, scenic hillsides, and wildlife habitat areas exists which could be permanently preserved for aesthetic and ecological purposes.
- Existing trees and vegetation. Existing on-site trees can serve a dual benefit of providing a basic design element for future landscaping and screening hillside development from outlying views.
- Subregional Planning. Due to the Specific Area Plan location and site characteristics, future development within the Plan Area will present numerous opportunities for compliance with the goals of applicable subregional plans, including the East Bay Regional Park District Trails Plan, Tri-Valley Subregional Planning Strategy, and South Livermore Valley Area Plan.

IV. LAND USE

The intent of the land use plan is to draw upon the existing character of the Vineyard Corridor and outlying Livermore Valley wine country to guide the development of future homes, vineyards, and possible commercial businesses within the Plan Area. This chapter translates the land use goals of the Specific Plan into the land use plan. The plan is presented in terms of an overall description and development standards and design guidelines for each land use district within the Plan Area. Regulations relating to construction activities are also provided to ensure that development takes place in a safe and efficient manner. The supporting circulation system is described in Chapter V, and the public facility systems (water, sanitary sewer, storm drainage, etc.) are presented in Chapter VI.

A. LAND USE OBJECTIVES

1. Establish a mix of land uses that promote the Plan Area as the western entry to the Livermore Valley wine country and provide an appropriate transition between the existing urbanized edge of Pleasanton to the west and the Ruby Hill development to the east.
2. Reserve centrally located sites for a community park and elementary school within the Plan Area to serve the existing and future needs of residents in the Plan Area, Ruby Hill, and the southeast Pleasanton area.
3. Create a strong, recreationally oriented neighborhood that integrates housing with on- and off-site open space, the Arroyo del Valle, Shadow Cliffs Regional Recreation Area, community park, and elementary school.
4. Encourage the development of vineyard related commercial uses such as an inn, spa, restaurant, conference facility, bed-and-breakfast, winery, etc.
5. Re-establish a substantial area of vineyards to utilize the productive quality of the soils and create an "anchor use" to which the character of future development can relate.
6. Buffer housing from noise, dust, and vibration impacts associated with the RMC Lonestar quarrying operation to the north and from traffic noise on Vineyard Avenue.
7. Preserve the major ridgeline in the southern Plan Area, limit development of hilltop areas to homes that can be substantially screened from outlying views, and limit hillside development to areas that can physically and visually accommodate it without disrupting the natural character of the site.

8. Ensure that future development of the hilly areas located south of Vineyard Avenue is designed to emphasize the rural character through careful siting of buildings, minimal disruption to the physical terrain, and sensitive architectural and landscape treatments.
9. Establish a unified site planning, architectural, and landscape character for the future development of Lots 18, 19, 21, and 28 that draws from the character of the Livermore Valley wine country, the approved Ruby Hill architectural design concepts, and the traditions of Southern European "vineyard village" design.
10. Provide for safe and functional re-use of the old Pleasanton landfill site.
11. Protect applicable open space areas for the production of natural resources such as aggregate mining materials.

B. PHYSICAL PLANNING CONCEPT

The land use plan is intended to facilitate a smooth transition between the urban edge of Pleasanton to the west and the Ruby Hill development to the east. The design concept requires environmentally-sensitive site planning and design of development in the hillside areas south of Vineyard Avenue and the integration of vineyards with other land uses north of Vineyard Avenue, organized to create a functional and attractive visual entry to the Livermore Valley wine country. Figure IV-1 depicts the general design theme that the land use plan is intended to reflect.

The gently sloping hillsides in Subarea 1 are planned for low density residential development. Homes here are to be designed to reflect traditional architectural styles and forms. The community park on Lot 14 will generally serve as a greenbelt buffer between the more urbanized Subarea 1 and the semi-rural Subarea 3.

Four residential sub-neighborhoods designated as "vineyard villages" and an elementary school are planned for the flatland area mostly north of the existing Vineyard Avenue and mostly in Subarea 2. Vineyard Avenue is to be relocated to the north along the Arroyo del Valle. Vineyards are planned between development and the realigned roadway. The purpose of this arrangement is to establish Vineyard Avenue as a safe and scenic rural street lined with vineyards on one side and the Arroyo del Valle on the other.

Residential development in Subarea 3 is to be sited so as to preserve significant natural features such as major ridgelines and hilltop areas, woodland, and riparian corridors. Development generally consists of clusters of custom homes designed to reflect the rural character and natural features of the hilly terrain. The large majority of land within this area is to be preserved as permanent open space.



FIGURE IV - 1

SPECIFIC PLAN DESIGN THEME



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The 384-acre Plan Area is divided into five land use categories as follows: residential, including possible wine country commercial-related businesses (119 acres); vineyards (67 acres); open space (154 acres); a 20-acre community park; and a 12-acre elementary school. Each of these land uses are described in greater detail below.

The land use plan (Figure IV-2) identifies individual development areas and uses. It also illustrates the planned circulation network. The number indicated within each residential development area on the plan refers to the number of dwelling units allowed within that area unless otherwise precluded for public health or safety purposes. This number does not include existing homes. Table II-1 presents a summary of the land use figures by land use district, and Table IV-1 specifies the number of existing and planned homes on a lot-by-lot basis.

1. Residential

The land use plan provides for 189 new housing units in addition to 18 existing homes which are planned to be retained or relocated on-site. In order to accommodate a range of housing types and densities that respond to the site terrain and community needs, the plan includes four residential designations. These consist of Semi-Rural Residential, Hillside Residential, Low Density Residential, and Medium Density Residential.

Semi-Rural Residential: The Semi-Rural Residential (SRR) district permits custom homes on 100,000-square foot minimum-sized lots. A total of four new SRR lots are permitted in the Plan Area. Land designated SRR is located in Subarea 3 at Lots 29, 30, and 31. These lots are intended to provide a transitional buffer between residential uses to the north and open space land to the south.

Hillside Residential: The Hillside Residential (HR) district provides for 19 new homes on 40,000-square foot minimum-sized lots. Development areas are located in the hilly portions of Subareas 1 and 3. The intent of this designation is to allow for a clustering of homes in well-defined areas of the hills in order to preserve significant natural features such as ridgelines, hilltops, oak woodland, creeks, and steep slopes. Open space land surrounding HR district is to be permanently preserved.

Low Density Residential: The Low Density Residential (LDR) district permits a total of 81 new homes with a 20,000-square foot minimum lot size. The LDR area is located in the rolling hills generally south of Vineyard Avenue. This designation is intended to provide a transitional density between the existing Medium Density development west of the Plan Area and the Hillside Residential and Open Space uses within the Plan Area.



FIGURE IV - 2

LAND USE PLAN



**Table IV-1
Existing and Planned Homes**

Lot No.	Existing Homes	Planned Homes	Total Number of Homes
1	0	6	6
2	1	3	4
3	0	4	4
4	1	6	7
5	1	2	3
6	1	2	3
7	1	1	2
8	1	0	1
9	0	4	4
10	0	4	4
11	0	3	3
12	0	9	9
13	0	1	1
14	1*	0	0
15	1	2	3
16	0	2	2
17	0	1	1
18	1	25	26
19	1	22	23
20	1	0	1
21	0	24	24
22	1	14	15
23	1	12	13
24	1	3	4
25	1	6	7
26	1	3	4
27	1	7	8
28	0	18	18
29	0	2	2
30	1	1	2
31	1	1	2
32	0	1	1
33	0	0	0
Total	19*	189	208*

* Existing caretaker home on Lot 14 to be removed upon development of the community park.

Medium Density Residential: The Medium Density Residential (MDR) district provides for up to 80 new single-family homes on 10,000-square foot minimum-sized lots. MDR development areas are concentrated in the more accessible and flatter portions of the Specific Plan Area, north of the existing Vineyard Avenue, and on Lot 28. These areas should be developed as individual neighborhoods with a design character compatible with the "vineyard village" concept described later in this Plan. Lot 28 also has the option to develop with a 100-room inn/spa/restaurant/conference facility instead of housing.

2. Agriculture

A key land use component of the Specific Plan is the Vineyard (V) district. The Plan provides for a total of 67 acres of vineyards on five existing lots with an estate home and possible support facilities permitted on each. Vineyards are intended to maintain the agricultural use of the area, reinforce the agricultural character of the area, create a pleasing driving experience for motorists travelling on Vineyard Avenue, and buffer future residential neighborhoods from traffic noise on the realigned Vineyard Avenue. In the event that vineyards should in some cases prove infeasible, related agricultural uses would be permitted. In addition, ten acres of the planned Vineyard land on Parcel 21 could be mined as a part of the RMC Lonestar quarrying operation, if desired by the owner.

3. Open Space

The Open Space (OS) district is generally intended to preserve the natural features of the hillside areas south of the existing Vineyard Avenue. Owners of these lots may retain their existing agricultural uses. No homes are permitted within the OS area; however, fencing and agricultural structures are allowed. The OS district also includes the three riparian corridors (one at the northwest end of Lot 18, and the second and third near the western and eastern boundaries of Lot 19; and a buffer between the northeast corner of the elementary school and vineyards on Lot 18).

4. Community Park

Development of a 20-acre community park is planned on Lot 14 to serve not only the residents of the Plan Area but the outlying community as well. Specific uses might include, picnic areas, trails, limited unlighted ballfields, and passive landscaped open space/buffer areas between the park and neighboring homes.

5. Elementary School

Development of a 12-acre elementary school is planned on portions of Lots 18 and 19 to serve the needs of Plan Area children as well as outlying residential areas to the east and west. Approximately six acres of building and parking areas would be developed along with six acres of paved and turfed play areas.

C. DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

All development proposals within the Specific Plan Area are subject to the City's Planned Unit Development (PUD) plan review and approval process, and all residential projects are subject to the City's Growth Management Program. These are important planning steps which allow for detailed implementation of the Specific Plan. The PUD process provides for the review of site-specific matters including land use, site layout, architecture, and landscaping. Relevant provisions of the Happy Valley Specific Plan along with other appropriate site-specific planning measures are to be incorporated into each PUD development plan.

Standards and design guidelines are provided below for each land use district. The land use standards are to be applied without variance. The site development standards (lot size and dimensions, building setbacks, building height, parking, and accessory structures) shall be determined through the City's PUD development plan approval process and may vary for unusual site conditions as long as any new standards are consistent with the intent of the Specific Plan.

Design guidelines are intended to assist developers and homeowners in the preparation of plans for new construction in a manner that is consistent with the unique character of the Vineyard Corridor. These will also be used by the City in its review of project plans for consistency with the Specific Plan. Guidelines are intended to be flexible in that they need not be applied in cases where the City finds that the implementation of a superior design solution can be achieved.

Development standards and design guidelines for each land use district are presented below. Following these are: (1) provisions intended to help protect common agricultural practices within the Open Space and Vineyard areas; (2) a discussion regarding the payment of agricultural mitigation fees which will be required for the development of certain portions of the Plan Area; and (3) provisions which regulate future construction activities.

1. Residential Designations

a. Residential Land Use Standards

- 1) Permitted Uses: The following uses shall be permitted in all residential districts unless otherwise noted:
 - a) Single-family detached housing;
 - b) Household pets;
 - c) Accessory structures and uses, including but not limited to a private garage, living area without a kitchen, enclosed storage, and recreation room;
 - d) Common recreation area and buildings for private use by residents of individual projects;
 - e) Small family daycare home;
 - f) Public water and/or sewer pump station;

- g) Public trails;
- h) The continuance of agricultural uses employed on the property within five years prior to Specific Plan adoption until such time as either: (1) development of new on-site homes commences; or (2) such uses cease for a period of at least one year; whichever occurs first; and
- i) The following are permitted only in the Semi-Rural Residential district:
 - (1) The keeping of farm animals as follows:
 - (a) Fifty mature fowl (chickens, ducks, geese, turkeys) or rabbits or other similar small animals or any combination thereof, for each 20,000 square feet of lot area; or
 - (b) Two mature sheep, or goats, or similar domestic animals; or one mature cow or horse, or other similar domestic animal, or any combination thereof, for each 20,000 square feet of lot area; and
 - (2) Vineyards, row crops, and orchards.

- 2) Conditional Uses: The following uses shall be permitted in all residential districts upon the granting of a conditional use permit in accordance with the provisions of the Pleasanton Municipal Code, unless otherwise noted:
 - a) Nursing home for not more than six patients;
 - b) Home occupation;
 - c) Large family daycare home;
 - d) Secondary (dwelling) unit;
 - e) Religious institution;
 - f) Temporary subdivision sales office;
 - g) A bed-and-breakfast inn, spa, restaurant, and conference facility on Lot 28, instead of housing; and
 - h) Landscape nursery on Lots 1, 2, and 3.

b. Residential Development Standards

- 1) Lot, Building Setback, and Building Height Requirements:
The following standards shall apply in each residential district in the Plan Area. Minor variations may be permitted subject to the PUD development plan approval process where necessary due to physical site conditions.

Table IV-2
Residential Development Standards

	SRR	HR	LDR⁽¹⁾	MDR
Minimum Lot Size (Sq. Ft.)	100,000	40,000	20,000	10,000
Minimum Lot Width (Ft.)	250	150	120	80
Minimum Lot Depth (Ft.)	250	150	120	100
Minimum Building Setbacks (Ft.) ^(2,3)				
Front	35	35	30	25
Side	20	20	15 ⁽⁴⁾	10 ⁽⁴⁾
Rear	40	40	30	25
Maximum Building Height (Ft.) ⁽⁵⁾	30	30 ⁽⁶⁾	30	30

Abbreviations: SRR Semi-Rural Residential LDR Low Density Residential
 HR Hillside Residential MDR Medium Density Residential

-
- (1) Due to uncertainty as to the future precise alignment of the realigned portion of Vineyard Avenue on Lot 18, adjustments to the boundary of the LDR area on this lot may be required in order to accommodate the planned number of housing units.
- (2) Accessory structures shall be set back a minimum of ten feet from the rear and interior side property lines. No accessory structures are permitted in required front and street side yards.
- (3) No building shall be permitted within 35 feet of the existing Vineyard Avenue right-of-way. Greater setback standards shall be applied as noted elsewhere in this Specific Plan.
- (4) Twenty-foot minimum street side yard setbacks on corner lots.
- (5) Building height is measured vertically from the lowest elevation of the building to the highest elevation of the building, excluding chimneys. Primary buildings shall be limited to two stories in height, and accessory buildings shall be limited to 25 feet and one story in height.
- (6) Exception: Primary buildings located on Lot 17 and on existing elevations exceeding 540 feet shall be limited to 25 feet in height and one story.

In HR areas, all home sites must be located within the designated development areas as generally depicted on the land use plan (see Figure IV-2). Lot lines may extend into land designated as Open Space, but primary residential buildings and accessory structures may only be sited within the designated development areas.

2) Visual Standards for Lot 4:

The north- and west-facing slopes of Lot 4 shall be substantially preserved with little or no grading. Grading on other areas of the site shall be carefully engineered to create natural and not geometric contours, with no slope exceeding a 3:1 grade.

3) Visual Standards for Lot 12:

In order to minimize the potential visual impacts of development on Lot 12, the following additional standards shall apply:

- a) No more than one lot shall be permitted to occupy the rear 200 feet of the existing Lot 12;
- b) Buildings on lots that are located within 300 feet of the existing Lot 12 rear lot line shall not exceed one-story and 25 feet in height;
- c) An open-space band between the rear lot line of Lot 12 and elevation 520 feet shall be permanently maintained in its current condition. An open space easement shall be granted over this area to the City at the time of final subdivision map recordation which restricts the use and improvements to livestock grazing, open fencing, underground infrastructure facilities, and storm-water drainage facilities. Solar collectors, dog runs, play structures, and private roads shall specifically not be permitted within this area. A land management plan shall be prepared to establish private responsibility for permanently maintaining this open space band;
- d) Future buildings located to the north of the northerly boundary of the open space easement shall be constructed at least 40 feet north of the easement; and
- e) Grading on the ridge and north-facing slope of Lot 12 shall be carefully engineered to create natural and not geometric contours, with no slope exceeding a 3:1 grade.

4) Visual Standards for Lots 22 and 23:

In order to minimize the potential visual impacts of development located along Vineyard Avenue on Lots 22 and 23, the following additional standards shall apply:

- a) Buildings on lots which abut Vineyard Avenue shall not exceed one story and 25 feet in height;
- b) A continuous open space band of at least 30 feet in width (to be precisely determined at PUD development plan approval) shall be maintained between the southern right-of-way line of the existing Vineyard Avenue and any future fencing on Lots 22 and 23. An open-space easement over this area shall be deeded to the City at the time of final subdivision map recordation which restricts the use of this area to landscape planting and irrigation, infrastructure

facilities, and storm water drainage facilities. No buildings or fencing shall be permitted within the area. A coordinated landscape and irrigation plan shall be designed for this area to screen the views of homes from outlying areas to the north. A landscape management plan shall be prepared to establish private responsibility for permanently maintaining landscape materials within this area. A coordinated fencing design plan shall be prepared for the area immediately south of the southern edge of the open space band. Future buildings to the south of the open-space band shall be located at least 30 feet back from the southern edge of the band.

5) Fire Safety Requirements:

- a) All brush and other flammable materials shall be cleared within at least 30 feet of new homes. Ornamental landscaping shall emphasize the use of fire-resistant species.
- b) The installation of an early-warning fire-detection system or device shall be provided in all residential and commercial structures required by the Fire Marshall.
- c) Automatic fire sprinklers shall be required in all structures specified in the Uniform Building Code in addition to all structures of 8,000 square feet and greater in floor area. Fire sprinklers shall also be required in all homes located in high and extremely high fire hazard areas (Lots 17, and 22-27).
- d) All new homes developed above elevation 540 feet shall be constructed with automatic fire sprinklers and Class A fire-retardant roofing. All other homes shall be constructed with at least Class B roofing. Wood shakes and shingle roofing on new homes shall not be permitted within the Plan Area.
- e) All homes located above elevation 540 feet shall be provided with an elevated on-site water storage tank (minimum 1,000-gallon capacity), subject to approval by the Fire Marshall, to ensure adequate water pressure for domestic use, automatic fire sprinklers, and other approved fire systems.
- f) All residences located on slopes greater than 15 percent shall be accessible from driveways designed to accommodate fire-fighting equipment. Driveways shall be a minimum of 16 feet wide and 20 feet clear. Driveways exceeding 150 feet in length shall be designed to allow a fire truck to turn around.

- g) All new development shall be provided with sufficient fire-flow facilities, in conformance with the requirements of the Fire Marshall.
 - h) All homeowners are encouraged to participate in the Livermore-Pleasanton Fire Department's voluntary home fire safety inspection program.
 - i) New homes surrounded by Open Space land shall be protected through the use of fire breaks, removal of any vegetation and other material presenting potential fire hazards, and the use of fire-retardant vegetation.
- 6) Mitigation Requirements for Noise, Dust, and Vibration:
- a) All new two-story homes constructed less than 140 feet from the centerline of the realigned Vineyard Avenue and all new homes located where projected noise levels exceed an L_{dn} of 55 dBA (Lots 8, 9, 13, 15, 18, 19, 20, 21, 26, 27, and 28) shall be constructed with a fresh-air ventilation and/or air-conditioning system that allows residents to maintain closed windows for noise and dust control. All windows facing the RMC Lonestar plant shall be dual-paned. Other mitigation measures (i.e., berms, landscaping, and siting strategies) may also be necessary depending upon the location of homes.
 - b) All new homes located on lots where projected noise levels exceed an L_{dn} of 60 dBA (Lots 8, 9, 13, 15, 18, 19, 20, 21, 26, 27, and 28) shall be designed to locate sensitive outdoor recreation areas on the south side of homes (opposite the RMC Lonestar quarry operations and the realigned Vineyard Avenue), wherever possible.
 - c) The recorded deed of sale for all lots (Lots 8, 9, 13, 15, 18, 19, 20, 21, 26, 27, and 28) potentially subject to noise levels in excess of an L_{dn} of 55 dBA shall include a clause which states that the property is in an area subject to excessive noise, dust, and vibration levels from gravel harvesting and processing and that the City of Pleasanton is not liable for possible damages due to such impacts.

c. Residential Design Guidelines

The following section provides design guidelines intended to establish the character of residential development. Included are provisions for site planning, architecture, grading, and landscaping. General design guidelines pertaining to all residential districts are provided first, followed by more specific standards applicable to each individual district.

1) General Residential Design Guidelines

a) Site Planning

- (1) Building setbacks along streets should be varied in order to reduce the potential for visual monotony.
- (2) The view of driveways and garages from streets should be minimized by utilizing shared drives and side entry garages, setting garages back from the front walls of homes, or locating garages behind homes.

b) Architecture

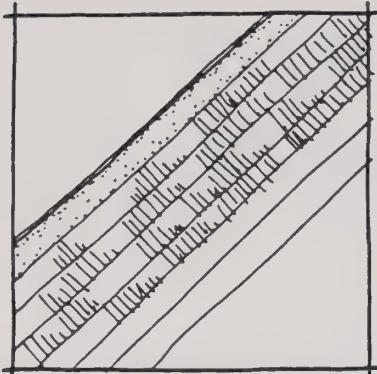
- (1) Buildings should be designed to minimize visual height and bulk. Building height, bulk, and floor area should respond to lot size, natural site terrain, and other site conditions. Wall recesses and projections, roof overhangs, decks, porches, bay windows, dormer windows, and other architectural features are encouraged to reduce visual bulk and create interest.
- (2) In sloping terrain, building form should conform to site topography by stepping buildings up or down hillsides instead of designing flatland homes for hillside settings.
- (3) Housing designs should be creatively mixed to avoid a repetition of similar facades and roof lines.
- (4) Roof forms should generally include traditional styles such as hip and/or gable. Flat and shed roofs should only be used as minor design elements, such as porches and dormers. Mansard and dome roofs are not appropriate.

- (5) Buildings should be designed for consistency of massing, proportions, details, materials, and colors on all exterior walls.
- (6) Building feature proportions (i.e., doors, windows, entries, roof forms, wall massings, etc.) should be carefully balanced. One-story entries are strongly encouraged while entries exceeding one-and-one-half stories should be prohibited.
- (7) Careful design attention should be given to details around doors, windows, eaves, etc.
- (8) The first-floor elevation above finished grade should be minimized to reduce overall building height.

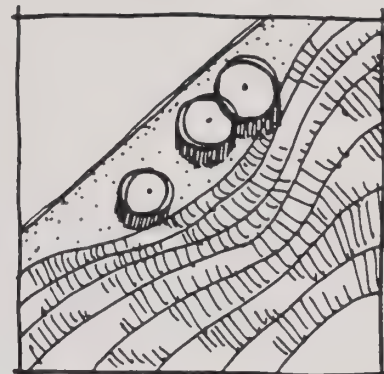
c) Grading

- (1) Grading for buildings, driveways, outdoor-use areas, etc. should be compatible with existing topographic contours and minimized to preserve the natural topography of the site.
- (2) Graded slopes should utilize "rounded landform grading" techniques to achieve a natural transition between graded areas and existing terrain (see Figure IV-3). Flat graded planes and sharp angles of intersection should be avoided to reduce the visual impact of grading.
- (3) Site grading should be used to screen buildings and reduce the visual mass of buildings, wherever applicable.
- (4) Substantial graded areas of uniform slope in hillside areas should be avoided. Cut and fill slopes should generally undulate and vary in slope gradient.
- (5) Tennis courts should not be permitted on existing slopes which exceed seven percent.
- (6) Cut slopes should generally occur behind buildings where they will be visually screened from fronting street views.
- (7) Graded slopes should maintain a maximum grade of 3:1.

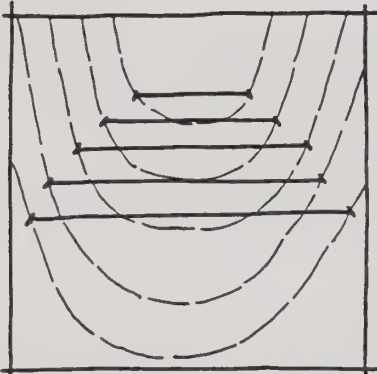
GRADING CONCEPTS



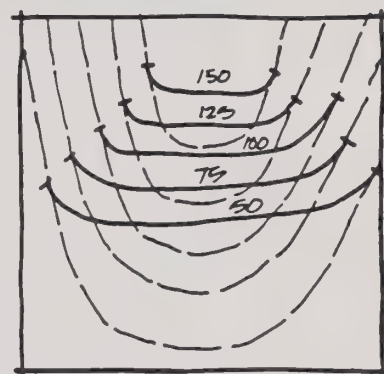
Uniform slope bank heightens the monotony of the roadway landscape.



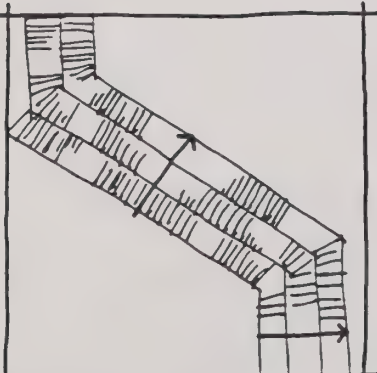
Undulate slope banks to achieve transition between graded areas and existing terrain.



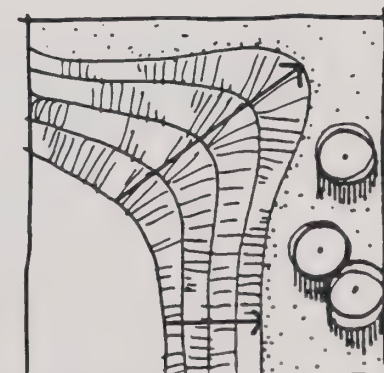
Unnatural cut slope edges with standard cut into nose or ridgeline.



Round cut and fill edges to conform with the existing terrain.



Engineered slope banks look forced and unnatural.



Vary slope bank gradients to create a natural appearance.

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FIGURE IV - 3



- (8) The height of retaining walls should generally not exceed five feet. The use of parallel retaining walls with landscaping between them may be necessary in order to minimize large cut slopes.
- (9) Existing areas that have been scarred by previous grading should be recontoured to a natural land form appearance, whenever feasible.

d) Landscaping

- (1) Substantial landscape planting should be provided to screen new homes sited along the full length of the existing Vineyard Avenue from view of this corridor.
- (2) The planting of new non-native materials should be compatible with the natural setting of the Plan Area and confined to the immediate vicinity of homes.
- (3) Wood arbors and vine trellises are encouraged to provide visual interest, screening, shade, and neighborhood design continuity.
- (4) Stone-faced entry monuments/walls are encouraged at appropriate street entry points to individual developments. Accompanying colorful accent and background planting are also encouraged to highlight these entries.
- (5) Stone materials used as facing on publicly visible retaining walls are encouraged to provide continuity with the street entries to individual developments.
- (6) Solid board fencing in moderate to steeply sloping terrain is appropriate only when located in close proximity to a residence. Site perimeter and other outlying fencing in these areas should remain visually open (i.e., split-rail or wire-mesh) in order to minimize the visual "ribbon-like" effect of fencing on the hillsides. Chain-link fencing in residential areas shall not be permitted, except for use around tennis courts.

2) Specific Semi-Rural Residential District Design Guidelines

The following specific design guidelines shall apply to the Semi-Rural Residential District:

a) Architecture

- (1) House designs should be limited to traditional ranch styles with simplified forms and wood exterior siding. Urban architectural styles featuring massive building forms, ornate character, and non-wood exterior materials are inappropriate for this area.
- (2) A farm building design concept compatible with the ranch house architectural style should be established for lands designated SRR as an element of individual PUD development plans, where applicable.

b) Landscaping

- (1) Existing rows of walnut trees located along driveways should be preserved, supplemented, and replanted as existing trees die out.
- (2) Agricultural fencing should consist of a white formal split-rail design, whenever possible.
- (3) Linear plantings of vineyards, row crops, and orchards; trees for windbreaks; and formal driveway landscape accents are encouraged to reinforce the symmetrical agricultural planting pattern of the area.

3) Specific Hillside Residential District Design Guidelines

The following specific design guidelines shall apply to the Hillside Residential District:

a) Site Planning

- (1) The visual prominence of development should be minimized by utilizing existing site features for screening such as tree clusters, depressions in topography, setback plateau areas, and other natural features.

b) Architecture

- (1) House designs should be limited to traditional architectural styles and forms adjusted to conform to the natural character of the site.
- (2) Architectural design should emphasize the blending of buildings into the natural surroundings and minimizing building visibility from outlying areas.
- (3) Roof forms and roof lines should be broken by a series of levels and planes to reflect the irregular forms of the surrounding natural features. Long linear unbroken roof lines are inappropriate.
- (4) Medium to dark earthtone building colors shall be used to complement the surrounding natural setting. Darker colors will generally be less conspicuous when viewed from a distance. White, tan, light gray, blue, and yellow are inappropriate building base colors.

c) Landscaping

- (1) Views of hillside homes from outlying areas which cannot be screened by way of location and architectural design should be substantially screened by use of evergreen tree planting.

4) Specific Low Density Residential District Design Guidelines

The following specific design guidelines shall apply to the Low Density Residential District:

a) Architecture

- (1) House designs should be limited to traditional architectural styles and forms, adjusted to conform to the natural character of the site.
- (2) Medium to dark earthtone building colors shall be used to complement the surrounding natural setting. White, tan, light gray, blue, and yellow are inappropriate building-base colors.

- (3) Houses should be designed with porches, bay windows, balconies, etc. overlooking the fronting streets to create attractive street views and to encourage neighborhood interaction.
- (4) The maximum height of future buildings on Lots 1, 2, and 3 may be reduced to 25 feet, if necessary, to preserve the privacy and views of existing residents on Montevino Drive.

b) Landscaping

- (1) Street tree programs shall be implemented for all LDR developments. The planting pattern of street trees should be informal, with randomly-spread clusters to establish a visually pleasing transition to the natural surroundings.
- (2) Should the owner of the Hatsushi Nursery located on Lots 1 and 2 choose to continue use of the nursery, the owner is encouraged to landscape a minimum of 15 feet of the front yard along the full site frontage and to screen the parking and non-plant material storage areas from the view of motorists on Vineyard Avenue.

5) Specific Medium Density Residential District Design Guidelines

The following specific design guidelines shall apply to the Medium Design Residential District:

Due to the proximity of the Plan Area to the South Livermore Valley wine country, the overall design character of the MDR areas (Lots 18, 19, 21, and 28) should reflect a vineyard theme. The primary design objective for this area is to create clusters of detached housing surrounded by vineyards, reminiscent of small rural European "vineyard villages" (Figure IV-4). Figure IV-5 presents a conceptual site plan to illustrate this concept. This plan is intended for illustrative purposes only. Building siting patterns, architectural design, and landscaping should follow in the wine-country styles and traditions.

a) Site Planning

- (1) The site-planning arrangement of the vineyard village is one of buildings organized in a clustered fashion and generally buffered from adjacent roadways and other land uses by vineyards.



FIGURE IV - 4

VINEYARD VILLAGE DESIGN THEME



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VINEYARD VILLAGE SITE PLAN CONCEPTS



FIGURE IV - 5



b) Architecture

- (1) Housing styles that reflect a European "wine country" architectural flavor including English Country, French Country, Mediterranean, Monterey/Spanish, or contemporary interpretations of these are appropriate for the MDR District. In addition to being typical of European wine country architecture, these styles are also included within the variety of styles being developed at Ruby Hill. Some of the key architectural elements common to these styles include:

- Pitched hip and/or gable roofs
- Courtyards
- Recessed or hidden garages
- Chimneys
- Balconies
- Decorative entries
- Dormer windows
- Bay windows
- Multi-paned windows
- Divided casement windows
- Stone, brick, plaster, stucco, or heavy timber building materials
- Stone or brick accents (such as wainscoting)
- Tile or slate roofing
- Light to medium earthtone colors

c) Landscaping

The landscape design concept for the MDR District emulates European vineyard villages by contrasting the natural woodland areas located south of Vineyard Avenue with more formalized street landscaping, street entry statements, and introduced vineyards. The landscape patterns created by formal tree patterns will define the circulation corridors and be seen from a distance. Colorful planting accents and other detailed landscape elements will further strengthen the formality of the concept.

- (1) Street trees should generally be placed in an equally-spaced and more formal pattern than in the LDR neighborhoods. Street trees should be used to define vehicular circulation routes and provide accent at street intersections.

- (2) The use of olive and poplar trees is encouraged for special visual and character accent purposes at visually prominent locations.
- (3) Flower color in the landscape is encouraged by the use of annuals, roses, and other flowering shrubs at highly-visible locations in all MDR neighborhoods.

2. Vineyard District

a. Vineyard Use Standards

1) Permitted Uses:

- a) Vineyard;
- b) Orchards and row crops, if and where it can be demonstrated that vineyards are not feasible to develop;
- c) Farm buildings;
- d) Single-family house;
- e) Household pets;
- f) Accessory structures and uses, including but not limited to a private garage, living area without a kitchen, enclosed storage, and private recreation room;
- g) Small family day-care home;
- h) Public water and/or sewer pump station;
- i) Public trails; and
- j) Mining of the ten acres located in the northeast corner of Lot 21, pursuant to the existing Alameda County mining permit provisions.

2) Conditional Uses:

- a) Bed-and-breakfast inn in lieu of or partially in lieu of housing which is otherwise permitted in the residential district on the original parcel at a rate of two bed-and-breakfast rooms per home;
- b) Winery and wine-tasting room;
- c) Nursing home for not more than six patients;
- d) Home occupation;
- e) Large family day-care home; and
- f) Secondary (dwelling) unit.

b. Vineyard Development Standards

- 1) Site development standards should be determined through the PUD development plan process.

- 2) The approximate vineyard acreage of each of the four lots that contain the Vineyard District is as follows: Lot 18 - 20 acres; Lot 19 - 18.5 acres; Lot 21 - 18.5 acres; and Lot 28 - 10 acres.
- 3) Homes, accessory structures, and agricultural structures should be confined to a one-acre portion of the lot.
- 4) Vineyard plantings shall be set back a minimum of 20 feet from all non-street frontage property lines. Unpaved service roadways for vineyards may be located within this setback. A minimum 50-foot wide landscaped buffer shall be developed between vineyard areas and the school grounds.
- 5) Agricultural easements shall be dedicated over all lands designated as Vineyards to ensure permanency of the permitted and conditionally-permitted agricultural uses in this area at the time of final subdivision map recordation.
- 6) Vineyard plantings (at least root-stock) and permanent irrigation facilities shall be completed prior to the issuance of building permits for the last 50 percent of dwellings to be constructed on the original lot on which a vineyard is located.
- 7) An agricultural management plan shall be submitted to the City for approval for all parcels proposing to develop new vineyards or other agricultural crops to ensure proper long-term maintenance and operation.
- 8) Minimum six-foot high fencing shall be installed along the steep banks of the Arroyo del Valle and all mining pits within the Plan Area to reduce the potential for recreational use of these areas. Signs shall be posted cautioning of steep, unstable slopes, and potential drowning hazards. In addition, the stability of slopes along the Arroyo shall be evaluated and modified, if necessary, to be made stable under short- and long-term conditions.
- 9) Following PUD development plan approval and prior to the installation of any new vineyards or other crops, each individual agricultural operator shall submit a grading plan to the City Engineer. The grading plan shall identify features for site drainage, runoff control, and appropriate best management practices for control of erosion and sedimentation.

- 10) Each individual vineyard or other crop owner shall be responsible for the preparation of an Integrated Pest Management (IPM) plan. The plan shall specify reduction of agricultural chemical use as an objective and present specific non-chemical measures (e.g., site planning, mechanical methods, or biologic controls) as alternatives to agricultural chemical use.
- 11) Potential bed-and-breakfast inn facilities shall be designed to ensure that interior noise levels of occupied rooms are less than 45 dBA L_{dn} . Dual-paned windows shall be required for all rooms with a view of Vineyard Avenue. Because windows must remain closed to obtain the required noise reduction, mechanical ventilation (e.g., air-conditioning) shall be provided for all rooms. A Title 24 analysis shall be required during the design phase to determine the potential need for additional noise-control measures.

c. Vineyard Design Guidelines

- 1) Vineyard home and bed-and-breakfast inn designs should generally comply with the MDR District design guidelines.
- 2) The use of olive and poplar trees is encouraged at visually-prominent locations for visual and character accent purposes.
- 3) The planting of rose bushes is encouraged at the ends of vineyard rows to add accent color.
- 4) Decorative, low-profile, split-rail fencing should be constructed along the edges of the vineyards which abut the realigned Vineyard Avenue.
- 5) Existing trees on Lots 19 and 21 which border Lot 20 should be preserved.

d. Vineyard and Other Agricultural Operation Procedures

- 1) All vineyard and other agricultural operators shall notify adjacent landowners at least 24 hours prior to the application of any pesticide sprays or dust.
- 2) Application of any pesticides by spraying or dusting shall be restricted to periods during which wind speeds are less than five miles per hour. Aerial spraying shall not be permitted.

e. Vineyard Ownership/Maintenance Alternatives

The development of vineyards is key to the land use and design character of the Plan Area. The long-term viability of the vineyards is therefore of utmost importance. The primary elements related to ensuring long-term viability involve marketing, ownership, and maintenance responsibilities. The options presented below are suggested as possible ways for accomplishing successful vineyard operations. A variety of other options may also exist.

- Vineyard lots could be sold as estate lots in which a custom home site and vineyard-related structures (i.e., a small production winery) could occupy up to one acre of land. The remaining land would be planted in vineyards. The grapes could be planted, maintained, and harvested by the property owner, or the owner could contract with a vineyard management company to undertake this work.
- Vineyard lots could be leased or sold to a vineyard operator or cooperative who would be responsible for planting, maintenance, and harvesting.
- Vineyard lots could be retained under the ownership of a homeowners' association. The planting, maintenance, and harvesting could be contracted out.

3. Open Space District

a. Open Space Use Standards

1) Permitted Uses:

- a) Grazing;
- b) Vineyards, orchards, and other row crops;
- c) Farm buildings;
- d) The continuance of agricultural uses employed on the property within five years prior to Specific Plan adoption until such time as such uses cease for a period of at least two years;
- e) Public and private water tank and pump station;
- f) Public sewer pump station; and
- g) Public trails.

2) Conditional Uses:

- a) Winery and wine-tasting room;
- b) Bed-and-breakfast inn in lieu of or partially in lieu of housing which is otherwise permitted in the residential district on the original parcel at a rate of two bed-and-breakfast rooms per home; and
- c) Park.

b. Open Space Development Standards

- 1) Proper management of Open Space areas is necessary to maintain the quality of the existing natural environment as well as to reduce fire hazards. A site-specific Open-Space Management Plan shall be prepared and submitted by each developer of lots which contain Open Space land as a part of the PUD development plan application. Plans shall address agricultural operations, open space maintenance, and wildlife and vegetation preservation needs.
- 2) A site-specific Wildland Fire Protection Plan shall be prepared and submitted by each developer of lots which contain Open Space land in accordance with Pleasanton Municipal Code, Title 20, Sections 20.08.045 and 20.08.048.
- 3) Emergency vehicle access shall be provided to any Open Space area required by the Livermore-Pleasanton Fire Department in a manner specified by the Department to ensure an adequate level of fire safety.
- 4) Potential bed-and-breakfast inn facilities shall be designed to ensure that interior noise levels of occupied rooms are less than 45 dBA L_{dn} . Dual-paned windows shall be required for all rooms with a view of Vineyard Avenue. Because windows must remain closed to obtain the required noise reduction, mechanical ventilation (e.g., air-conditioning) shall be provided for all rooms. A Title 24 analysis shall be required during the design phase to determine the potential need for noise control measures.

c. Open Space Design Guidelines

- 1) Native trees, shrubs, and groundcover should be planted in the vicinity of the Open Space wetland area of Lot 28. Plantings should be organized in naturalistic groupings which do not disturb the actual wetland area.

4. Community Park District

a. Community Park Use Standards

- 1) The existing residential use and kennel on Lot 14 may continue until such time as park site construction necessitates their removal.
- 2) Permitted uses are to be determined following the completion of a park master plan prepared in conjunction with input from the Park and Recreation Commission and neighboring residents, and a detailed landfill hazardous materials investigation.

b. Community Park Development Standards

- 1) The design of the park shall generally avoid any features that would require removal of the existing cover or excavation into the landfill materials. Should excavation into the landfill materials be required (e.g., for utilities or building foundations), the excavations shall be made under a worker health and safety plan prepared by a Certified Industrial Hygienist.
- 2) Night-time sports field lighting shall not be permitted.
- 3) Setbacks and landscaped buffers of at least 30 feet in width shall be incorporated into the park site plan to screen existing and proposed adjacent residential areas from park noise and activities. This requirement shall not pertain to driveway connections to Vineyard Avenue in front of the park.
- 4) Outdoor security lighting shall be shielded to direct light downward to minimize its visibility from surrounding properties.
- 5) Uses in the southernmost portion of the park shall generally be restricted to passive activities such as pedestrian/equestrian trails and open space.

5. Elementary School

a. School Use Standards

- 1) Permitted Use:
 - a) Elementary School and typical accessory uses.

b. School Development Standards

- 1) The proposed school shall conform to the guidelines established by the California Department of Education for school setbacks from electrical power line easements.
- 2) School outdoor lighting should be designed to direct illumination downward and screened on top to minimize glare impacts on residents located in the hillside areas to the south.
- 3) A thorough school parking needs study should be conducted in advance of school development plan approval by the Pleasanton Unified School District, and the District shall be encouraged to provide on-site parking adequate to accommodate all school-event parking needs.

D. POTENTIAL AGRICULTURAL/NON-AGRICULTURAL USE CONFLICTS

When urban development occurs in close proximity to agricultural uses, conflicts may arise over common agricultural practices. This Specific Plan recognizes that permitted agricultural pursuits conducted in accordance with good practice and maintenance are desirable and should not be deemed a nuisance. This Plan further intends to maximize the protection of agricultural areas from urban encroachment by making the future owners/tenants of land within the Plan Area aware of the nearby location and potential impacts of agricultural operations prior to moving to the area. In order to help ensure protection, the recorded deed of sale of all subdivided parcels, and all property rental/lease agreements within the Plan Area shall include a statement to be signed by the future owner/tenant stating that:

"You are hereby advised that this property is located near land zoned and/or used for agricultural purposes. Agricultural use is defined as including but not limited to day and night time activity relating to livestock grazing, the keeping of livestock, the growing and processing of agricultural crops, and any commercial agricultural practices performed as incidental to or in conjunction with such operations. Some of the impacts associated with agricultural use include but are not limited to noise, odors, dust, chemicals, refuse, waste, unsightliness, use of agricultural equipment, and traffic. Permitted agricultural pursuits conducted in accordance with good practice and maintenance are not deemed by the City of Pleasanton to be a nuisance."

E. AGRICULTURAL MITIGATION FEE

Lots 18 through 28, 32, and 33 are included within the South Livermore Valley Area Plan boundary and are further situated within a subarea of the Area Plan designated as the "Vineyard Avenue Transitional Area." The City of Pleasanton has previously indicated its support and intent to participate in the implementation of the Area Plan.

One of the provisions of the Area Plan requires the payment of a fee for certain development that occurs within certain portions of "transitional areas." The purpose of the fee is to ensure that urban development compensates for the loss of cultivable or potentially cultivable soils through the payment of agricultural mitigation fees to fund the South Livermore Valley Agricultural Land Trust. Consistent with this provision, fees are to be collected by the City and distributed to the Land Trust at the time of subdivision map recordation for urban development projects proposed on Lots 18 through 28, 32, and 33. Fees are currently calculated based on a one-to-one ratio between the cost per acre for agricultural easements to the Trust and the net acreage of potentially cultivable soils less than 25 percent in slope lost to development.

F. CONSTRUCTION ACTIVITIES

Construction activity requirements are presented below which are intended to ensure that future development proceeds safely and efficiently.

1. Construction Timing

Construction of housing, roads, other infrastructure, and other site improvements shall be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Saturday.

2. Construction Dust Control

Future development within the Specific Plan Area will result in dust and other particulates during site preparation and construction activities. In order to avoid adverse impacts on air quality, the following measures shall be implemented:

- a. During the construction period, all active unpaved construction areas shall be watered at least twice daily or treated with non-toxic soil stabilizers in order to avoid dust. Exposed stockpiles of dirt or sand shall be enclosed, covered, watered twice daily, or treated with non-toxic soil binders.
- b. If soil material is carried on public or private roads, such roads shall be swept daily with water sweepers to control dust, where applicable.

- c. In graded construction areas, permanent replacement vegetation shall be planted as quickly as possible, properly irrigated, and maintained in healthy growing condition. Graded areas that remain inactive for ten days or more during the rainy season (October 1 to April 1) without permanent replanting shall be hydroseeded or stabilized.
- d. All trucks hauling excavated materials shall be covered with tarpaulins or other effective covers.
- e. All unpaved access roads, parking areas, and staging areas at construction sites shall be rocked, watered three times daily, or covered with non-toxic soil stabilizers.
- f. Traffic speed on unpaved roads shall be limited to 15 miles per hour.
- g. Reactive organic gas (ROG) emissions from adhesives, clean-up solvents, paint, and asphalt paving materials used during project construction shall be reduced by using materials with a low ROG content, in compliance with Bay Area Air Quality Management District standards.

3. Geological Requirements Relating to Construction

Due to the unique geological conditions presented by the Plan Area, a series of site-specific studies and mitigation measures for future development will be necessary. These include the following:

- a. All structures and constructed slopes shall be designed in accordance with the most recent Uniform Building Code as modified by the California Code of Regulations. A soils and geotechnical report shall be prepared for each individual development (unless otherwise approved by the City Engineer) within the Specific Plan Area. Analysis presented in the geotechnical report shall conform with the California Division of Mines and Geology recommendations presented in the Guidelines for Evaluating Seismic Hazards in California. Projects located within the alluvial deposit areas of the project site shall specifically address and be designed to withstand the potential for liquefaction. Projects within the upland areas or adjacent to steep slopes of upland areas shall specifically address the potential for seismically-induced landsliding. The report shall be submitted to the City for review by a qualified consulting geotechnical engineer reporting to the City at the applicant's cost. The project shall incorporate all recommendations of the City's consulting engineer into the design.

- b. For areas with slopes steeper than 20 percent or within or adjacent to existing landslides, a slope-stability analysis report (addressing static and pseudo-static conditions) shall be prepared by a licensed Civil Engineer and include the appropriate recommendations from the approved geotechnical report for any proposed development or roadway construction. The report shall provide recommendations for control of surface drainage, adequate groundwater drainage, and slide mass removal or stabilization, if necessary. The analysis shall be supported by investigation of site-specific conditions that shall include but not be limited to:
- estimated recency of slope failures and potential for continued movement;
 - depth of landslides or colluvial deposits and characterization of slide plane(s);
 - shear strength data for subsurface materials at the project site;
 - location of springs;
 - groundwater level detail that characterizes seasonal fluctuations; and
 - justification of the seismic coefficient used in pseudo-static analysis.
- c. Proposed cut-and-fill slope designs shall have factors of safety not lower than 1.5 under static conditions and 1.0 under seismic shaking conditions.
- d. All grading plans, cut-and-fill slopes, compaction procedures, and retaining structures shall be designed by a licensed Geotechnical or Civil Engineer. All grading and slope preparation activities shall be conducted under the supervision of a licensed Geotechnical Engineer or certified Engineering Geologist.
- e. To the extent possible, grading plans shall minimize earth-moving and site-grading. Development design shall avoid placing structures and utilities on or near the tops of slopes or in the shallow subsurface of slopes.
- f. The final geotechnical report for the grading plan for proposed projects shall be prepared by a professional engineer and approved by the City Engineer. The report shall address the potential for delayed (differential settlement) consolidation within deep fills and associated land surface subsidence. The report shall provide specific recommendations for:
- fill compaction specifications that consider the likelihood of eventual saturation and wetting and drying cycles for the fill materials;

- removal of colluvial material or weathered rock that may be subject to consolidation under the load of proposed fills;
 - design that minimizes the variability of fill thickness within fills that underlie structures or other improvements at the project site; and
 - design and operation of adequate subsurface drainage systems for fills (particularly beneath heavily-irrigated areas or other water sources such as swimming pools or detention basins). Drainage systems for fills shall be designed to minimize maintenance and ensure long-term performance. Flow from the drainage system shall be controlled so as not to cause or contribute to erosion of existing drainage channels.
- g. On expansive soils with moderately high shrink-swell potential (Perkins loam and Pleasanton and Positas gravelly loam), building foundations and improvements shall consist of drilled pier and grade beams, deepened footings (extending below expansive soil), or post-tensioned slabs. Alternatively, expansive soil shall be removed and replaced with compacted non-expansive soil prior to foundation construction. The geotechnical report for each phase of the project shall require that subgrade soils for pavements consist of moisture-conditioned, lime-treated, or non-expansive soil, and that surface (including roof drainage) and subsurface water be directed away from foundation elements to minimize variations in soil moisture.
- h. Improvements proposed to be placed on slopes greater than ten percent, or within ten feet of the tops of such slopes, shall be approved for construction by a California licensed Geotechnical Engineer or California certified Engineering Geologist. The City shall approve grading plans and slope designs prior to implementation.
- i. Prior to the final design of the relocated Vineyard Avenue, the stability of the slopes of the south bank of the Arroyo del Valle within 200 feet of the proposed location of the roadway shall be evaluated by a qualified Geotechnical Engineer to determine if slope failures could affect the short- and long-term integrity of the constructed roadway or if construction or operation of the roadway could affect the stability of the banks. A geotechnical report shall be prepared for the City that specifies appropriate slope design and construction. Recommendations of the report shall be implemented in the roadway specifications.

4. Drainage Requirements Relating to Construction

- a. Grading and drainage design plans shall be submitted to the City Engineer for each phase of project development within the Plan Area, and reviewed for compliance with all applicable City requirements. The drainage design shall demonstrate that the proposed development will minimize or eliminate increases in the volume or rate of runoff from the development sites.

5. Water Quality and Protection Requirements Relating to Construction

- a. Projects disturbing more than five acres of land during construction shall be required to file a Notice of Intent (NOI) to be covered under the State NPDES General Construction Permit, for discharges of storm water associated with construction activity. The developer shall propose control measures that are consistent with the State General Permit.

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and implemented for each site covered by the general permit. A SWPPP shall include Best Management Practices (BMPs) designed to reduce potential impacts to surface water quality through the construction and life of the project. A SWPPP shall be prepared such that, when properly implemented, will reduce or eliminate impacts to surface water quality from all phases of the project. Required elements of the SWPPP include the following:

- 1) Construction storm water management controls shall be implemented which include practices to minimize the contact of construction material, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly-designed centralized storage areas that keep these materials out of the rain. It shall also include a monitoring program by the construction site supervisor.
- 2) Best Management Practices (BMPs) shall be implemented to reduce erosion of exposed soil and may include, but not be limited to, soil stabilization controls, watering for dust control, perimeter silt fencing, placement of hay bales, and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control to keep sediment on the slopes. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary

measures. If hydroseeding is selected as the primary soil stabilization method, then slopes shall be seeded by September 1 to October 1. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional both during dry and wet conditions.

- 3) Appropriate measures shall be taken to prevent storm water pollution associated with post-construction activities at developed sites. Because the Plan Area includes relatively low-density development, it may be practical for the design of the residential development areas to include "no net gain" in stormwater runoff from the site. Large single-family home lots generally provide many opportunities for stormwater management, including unit pavers on sand patios, concave lawn/infiltration basins, and dry wells connected to roof downspouts.

6. Public Health and Safety Requirements Relating to Construction

In order to ensure that development of the Plan Area proceeds safely, the developers of future projects shall be required to comply with the following measures:

- a. Prior to development of Lots 1, 2, 18, 19, 21, 22, 26, 28, 30, and 31, where nursery or significant agricultural operations now exist or once existed, a Phase I Environmental Site Assessment shall be conducted by a qualified environmental professional in accordance with the requirements of the American Society for Testing and Materials (ASTM, 1997). If the findings of the Assessment indicate the presence of, or potential for, hazardous materials use associated with the current or past agricultural uses of these sites, a Phase II Environmental Site Assessment shall be conducted by a qualified environmental professional to ascertain whether past or current land uses have contributed to soil and/or groundwater contamination at the site. Soil and groundwater samples collected during the Phase II Assessment shall be submitted to a California-certified laboratory for analysis.

The analytical results of the Phase II Assessment shall be evaluated by a qualified environmental professional to determine whether chemicals could pose a hazard to future site users, construction workers, or the environment. If chemicals at the site could pose a hazard, a qualified professional shall conduct a risk assessment to quantify hazards based on soil and/or groundwater sampling results, and develop appropriate remediation measures, as necessary, to reduce potential risks for future site users to acceptable levels. Potential remediation measures may

include, but not be limited to, soil removal, capping with an impermeable cover, soil vapor extraction, and groundwater remediation and/or monitoring. Regulatory agency oversight shall be obtained, as appropriate, from the appropriate local and/or State agency.

- b. An inventory of the interior areas of all on-site agricultural structures shall be conducted by an environmental professional prior to their demolition. If hazardous materials are identified as being stored in these areas, such materials shall be transported to and disposed of/recycled at an appropriate off-site facility. Monitoring by an environmental professional during the removal of floors/foundations shall be conducted to determine if hazardous materials spills are present or suspected to have occurred in these areas. After demolition, a report by the environmental professional shall be submitted to the City delineating whether hazardous materials appeared to be present below the floors or foundations. If hazardous materials are present, a soil-sampling plan shall be prepared and implemented prior to disturbance of native soils. The soil samples shall be collected by a qualified environmental professional and submitted to a California-certified laboratory for analysis. The analytical results shall be evaluated by a qualified environmental professional for development of an appropriate health and safety plan for construction workers involved in site-demolition activities, waste-disposal options, and potential site investigation/remediation.
- c. A Spill and Pollution Prevention Plan shall be prepared by the developer of each project with soil disturbance (e.g., grading) of at least five acres. The Plan must: (1) be prepared prior to the start of earthwork activities; (2) designate an on-site employee responsible for Plan implementation; and (3) include anticipated equipment needs and maintenance, emergency response procedures for hazardous materials releases, and procedures for contacting designated regulatory agencies in the event of a hazardous materials release.
- d. Removal of above-ground or underground fuel tanks shall take place in accordance with the requirements of the Livermore-Pleasanton Fire Department, if these are to be removed as part of development under the Specific Plan.
- e. Demolition of all structures shall be conducted in accordance with applicable requirements of the California Department of Industrial Relations (Cal OSHA) for lead, with appropriate follow-up measures taken if lead-based paint is found.

- f. Demolition of all structures shall be conducted in accordance with the requirements of Cal OSHA and the Bay Area Air Quality Management District (BAAQMD) for asbestos, with appropriate follow-up measures if asbestos is found.
- g. Notification of the Underground Services Alert (USA) as well as site tenants shall take place prior to ground breaking to obtain information on the location of possible underground utilities.
- h. Developers of land containing detention basins, springs, ponds, etc. shall contact the Alameda County Mosquito Abatement District (ACMAD) for assistance in controlling and managing potential disease-bearing vectors and their breeding areas to reduce the potential for transmission of public health diseases associated with these organisms. The ACMAD shall also be consulted for assistance in the control and management of other organisms (e.g., Valley black gnat) and their breeding areas that pose an environmental nuisance. The owners of such developments shall be responsible for implementing all applicable recommendations of the District.
- i. A Health-Risk Assessment (HRA) shall be prepared for the City by a qualified health-risk professional for use of Lot 14 as a City park. The HRA shall evaluate the existing data on air, soil, and water quality from the site to determine if additional sampling and testing is required. The HRA shall be prepared in conformance with the United States Environmental Protection Agency (EPA) and CalEPA guidelines. If the HRA indicates that park use of the site is appropriate, the Parks and Recreation Department shall prepare a worker Health and Safety Plan for development, operation, and maintenance of the proposed park. If the HRA concludes the site currently has unacceptable health risks, then either (1) a remediation plan shall be prepared for approval by the United States EPA and CalEPA, and the specified remediation measures shall be implemented; or (2) the Plan shall be modified to accommodate another use.
- j. The City shall attempt to obtain as-built drawings of all components of the methane gas collection system on Lot 14. If obtained these records shall be maintained at the Building Inspection Department to ensure that any excavations made during park construction or operation do not rupture components of the system. The Department shall establish a protocol for all excavation activities (including drilling) that require the evaluation of the gas collection system drawings prior to the commencement of activities.

- k. All above-ground components of the methane gas collection system on Lot 14 shall be protected with locked fences or other secure enclosures to prevent public contact with these facilities for as long as they are needed.
- l. All development projects on lands adjacent to Lot 14 shall conduct a gas survey to determine if significant gas migration from the landfill is affecting the development site. The results of the survey shall be used to determine if standard construction of structures is appropriate or if non-standard foundation/building ventilation systems should be required.
- m. Evacuation plans shall be prepared for the elementary school and possible bed-and-breakfast inns, spas, restaurants, and conference facilities located within the Del Valle Dam Flood Inundation Area for the unlikely event of a failure to the Del Valle Dam.

7. Energy-Efficient Construction

- a. Energy-efficient heating and cooling systems and energy-efficient lighting shall be required in all residential, commercial, and school construction.
- b. Only United States Environmental Protection Agency-approved fireplaces and wood-burning stoves shall be permitted in residential units.

V. CIRCULATION

The following section presents the Circulation Plan. Included is information pertaining to the existing and planned circulation systems, off-site street improvement mitigations, street design standards, street and landscape design guidelines, transit service, and trails. The intention of the Circulation Plan is to provide efficient vehicular, pedestrian, bicycle, and equestrian movement while protecting the rural quality of the Plan Area.

A. CIRCULATION OBJECTIVES

1. Develop a safe and convenient circulation system to accommodate planned growth within and beyond the Plan Area that meets City traffic level of service standards.
2. Realign Vineyard Avenue along the Arroyo del Valle to reduce noise in the center of the Plan Area and to accommodate safer and more convenient travel.
3. Ensure adequate access for emergency vehicle service to all new homes.
4. Provide an alternative to vehicular travel throughout the Plan Area by way of an integrated system of pedestrian, bicycle, and equestrian trails.
5. Provide adequate public transit connections to the outlying region.
6. Establish Vineyard Avenue as a scenic entry to the wine country through the use of rural road standards, implementation of a generous landscape program that features native tree plantings, colorful landscaping accents, and compatibility with the Ruby Hill landscape design program.

B. EXISTING CIRCULATION

Existing vehicular access to the Vineyard Avenue Corridor is provided by Vineyard Avenue, the only public street within the Plan Area. Vineyard Avenue originates in Downtown Pleasanton and terminates at Highway 84. In its current configuration, it is a narrow (23 feet wide) two-lane rural roadway contained within a 50 foot right-of-way. Numerous driveways and private roads intersect Vineyard Avenue with limited sight distance. The existing public and private street system within the Plan Area is illustrated in Figure V-1.

EXISTING PUBLIC AND PRIVATE STREETS

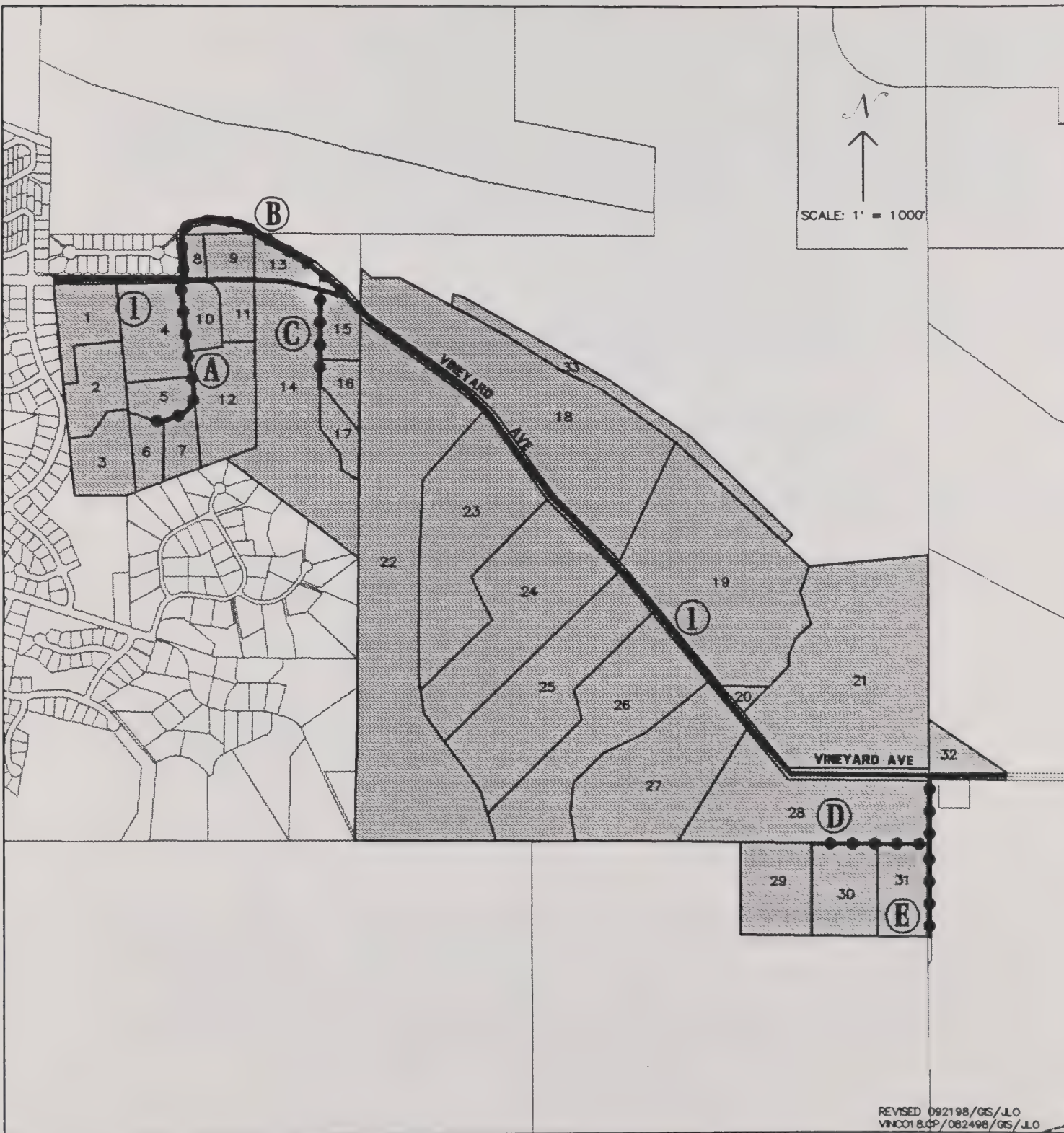


FIGURE V - 1

LEGEND

- PUBLIC STREET**
 - 1. Vineyard Avenue
- PRIVATE STREETS**
 - A. Clara Lane

- B. Vineyard Avenue "S - Curve"
- C. Pietronave Lane
- D. Thibault Lane
- E. Foley Lane



C. PLANNED CIRCULATION

The Plan Area will require new and upgraded circulation improvements to accommodate both internal and external vehicular traffic as well as pedestrian, bicycle, and equestrian movement. Figure V-2 presents the Circulation Plan which includes a realignment of Vineyard Avenue along the Arroyo del Valle, a loop collector street around the planned elementary school, a variety of local and hillside streets, and emergency vehicle access roads. The location of streets shown on Figure V-2 are conceptual and subject to more specific alignment during the PUD development plan review process.

Discussion regarding each street type is provided below, and actual standards are detailed in Table V-1.

1. Vineyard Avenue

One of the key elements of the Plan is the realignment of Vineyard Avenue along the Arroyo del Valle. This will provide safety benefits, including the elimination of existing limited sight distance, improved capacity, and the elimination of numerous driveway/roadway intersections. The realignment will also create a scenic amenity for motorists by providing views of the Arroyo del Valle on the north side and vineyards and the school playfields on the south side. Additionally, it will serve as a "by-pass" by moving traffic to the perimeter of the Plan Area where noise impacts on existing and future development will be greatly reduced.

The realigned Vineyard Avenue is planned as a two-lane, generally undivided street section that extends through the west side of Lot 18 eastward along Parcel 33 at the northern Plan Area boundary and ultimately intersects with the existing Vineyard Avenue at Lot 32. Major points of intersection with other streets will require protected left-turn lanes and right-turn deceleration lanes. In addition, a traffic signal is planned at the intersection of Vineyard Avenue and the western side street of the elementary school. Direct driveway access to the realigned roadway will be permitted only if necessary for vineyard estate lots. Vineyard Avenue is envisioned as a rural roadway with a 36-foot wide pavement section consisting of two 12-foot travel lanes, two six-foot bicycle lane/shoulders, and a six-foot separated pedestrian/ equestrian trail along the north side of the street. Vee ditches are to be graded along both sides of the street in place of curbs. The total right-of-way width required for these improvements is 55 feet.

The existing Vineyard Avenue will remain paved but will be closed to through-vehicular traffic and will revert to use by pedestrians, bicyclists, equestrians, emergency vehicles, and utility maintenance vehicles.

PROPOSED CIRCULATION SYSTEM IMPROVEMENTS

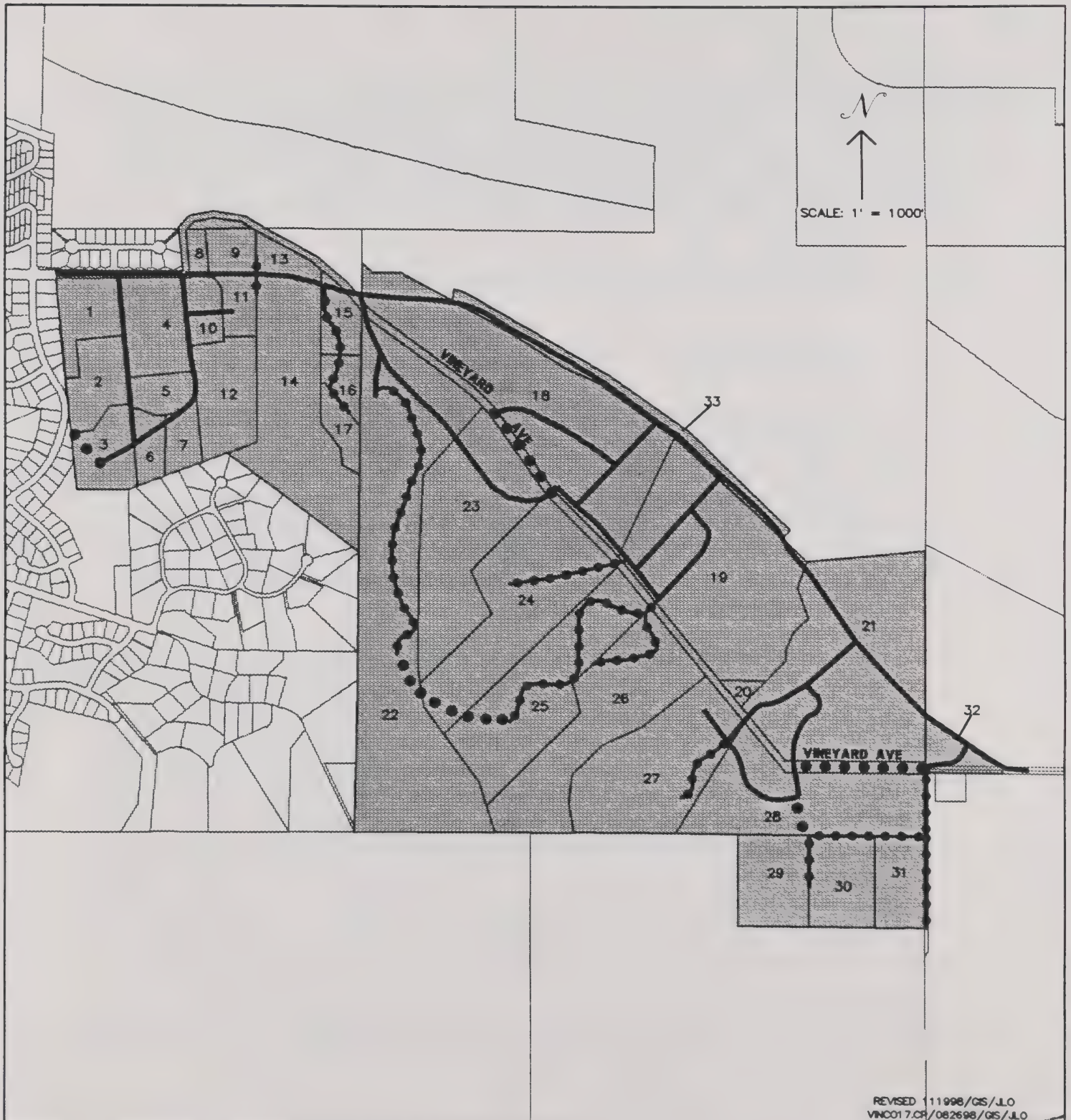


FIGURE V - 2

LEGEND

- Public Streets
- Private Streets
- Emergency Vehicle Access Roads

NOTE: Street alignments shown above are conceptual only and may change subject to the PUD development plan review process.



Table V-1
Street Construction Standards

Street Characteristics	Realigned Vineyard Avenue	School Loop Collector Street	Local and Cul-de-Sac Streets	Private Hillside Streets
Number of Travel Lanes	2 ⁽¹⁾	2 ⁽¹⁾	2	2
Width of Travel Lanes	12 feet	11 feet	10 feet	8 feet paved plus 2 feet clear (exception: 9 feet paved plus 2 feet clear at Lot 25)
Street Parking Lanes	Emergency only	Two 7-foot wide parking lanes on the east and west side streets; one 7-foot wide parking lane on the north side of the street which fronts the south side of the school	Two 6-foot wide parking lanes	No
Bicycle Lanes	2 (6 feet wide)	No	No	No
Curbs	No	Yes	Yes	Where necessary for drainage
Sidewalks	No	On school side only	Only in MDR Districts	No
Trails	North side only	No	No	No
Street Lights	No ^(2,3)	Yes ⁽³⁾	Yes ⁽³⁾	No ^(2,3)

⁽¹⁾ Left-turn lanes and right-turn deceleration lanes are permitted at major street intersections.

⁽²⁾ Unless required for vehicular safety at street intersections.

⁽³⁾ Light intensity shall be the minimum required for safety, light fixtures shall be shielded to direct light downward, and light poles shall be of a semi-rural design and material.

2. Loop Collector Street

A loop collector street is planned around the perimeter of the elementary school site to provide convenient access, parking, and security surveillance. Local and hillside streets and the MDR Districts located at Parcels 18 and 19 will also connect to the loop. Individual driveway access to the loop should not be permitted. The loop is to consist of a 36-foot pavement section with parking, curbs and gutters, and a sidewalk only on the school side of the loop.

3. Local and Cul-de-Sac Streets

Local and cul-de-sac streets are planned to provide access to individual lots. These streets will have a 32-foot pavement section with parking, curbs, and gutters. Sidewalks on both sides of the street will be required only in the MDR districts.

4. Private Hillside Streets

Private hillside streets are planned to provide access to individual lots in the steeper portions of the Plan Area. The hillside street section generally consists of a 16-foot pavement width (with two feet clear on either side) with curbs only where necessary for storm water drainage. No parking is allowed.

Due to the excessive length of the dead-end hillside streets on Lots 22 and 25, these lots shall be connected by way of a paved emergency vehicle access (EVA) road so as to create an emergency loop route to Vineyard Avenue. Similarly, an EVA road shall be constructed between Lots 28 and 29, if feasible and between Lot 3 and Montevino Drive. Hillside streets and EVA roads are to be maintained privately.

D. OFF-SITE STREET IMPROVEMENT MITIGATIONS

The City shall contribute the Plan Area's pro-rata cost-share of completing the following off-site street improvements generated by the Plan Area development in order to mitigate otherwise potentially unacceptable levels of traffic service:

1. Bernal Avenue/Vineyard Avenue intersection signalization and expansion, including median landscaping on Vineyard Avenue; and
2. A second Bernal Avenue bridge crossing at the Arroyo del Valle.

All Plan Area developers will be responsible for complying with the Tri-Valley Transportation Development Fee to help off-set the cost of constructing subregional traffic mitigation improvements, and with the City Traffic Department Fee to contribute to the cost of constructing new city-wide traffic-related improvements.

E. STREET DESIGN STANDARDS

1. Street cross-sections should be designed as specified in Table V-1 and in accordance with the Public Works Design Guidelines. Adjustments to design standards may be approved in order to preserve existing trees and other significant natural site features in accordance with the PUD development review process.
2. Left-turn lanes and right-turn deceleration lanes shall be provided on the realigned Vineyard Avenue at intersections with the collector loop street and local streets.
3. Direct driveway access to the realigned Vineyard Avenue shall be permitted if necessary for only the Vineyard estate lots.
4. Vehicular access to future homes on Lots 9 and 13 shall be provided by way of a single shared private driveway along the common property line between these two lots.
5. In order to mitigate the impact of noise to an acceptable level along Vineyard Avenue in the northwest portion of the Plan Area, a minimum six-foot high landscaped earth berm shall be constructed along the Vineyard Avenue frontage of Lots 4, 9, 10, 11, and 13 (and Lot 8, if desired by the owner of this developed parcel); and a decorative masonry soundwall with landscaping shall be constructed along the Vineyard Avenue frontage of Lot 1 and designed to complement the existing soundwall and landscaping on the north side of Vineyard Avenue.
6. Gated developments which preclude public access to developments shall not be permitted unless required for agricultural protection purposes.
7. Temporary emergency vehicle access roads may be required in areas where planned loop street systems are developed incrementally and where temporary dead-end streets exceed 500 feet in length or the number of homes that they serve exceed 14.

F. STREET DESIGN GUIDELINES

1. Cut-and-fill grading for hillside streets should be minimized. Hillside streets should be aligned to follow the contours of the land and preserve existing trees and other natural features wherever possible.
2. Street-light pole and fixture design should reflect the rural character of the Plan Area.

G. STREET LANDSCAPE DESIGN GUIDELINES

A Master Street Landscape Plan shall be prepared by the City following adoption of the Specific Plan which will provide guidance for decorative landscaping throughout the Plan Area street system. The following primary design principles shall be integrated into the Plan:

1. Realigned Vineyard Avenue Landscaping

- a. Views of the quarry operations from the realigned Vineyard Avenue should be screened to the fullest extent feasible through the use of clustered evergreen tree plantings along the north side of Vineyard Avenue.

2. Vineyard Avenue Signage

Signage along Vineyard Avenue should conform to the "Wine Country Community Access Corridor" design guidelines developed by the Livermore Chamber of Commerce.

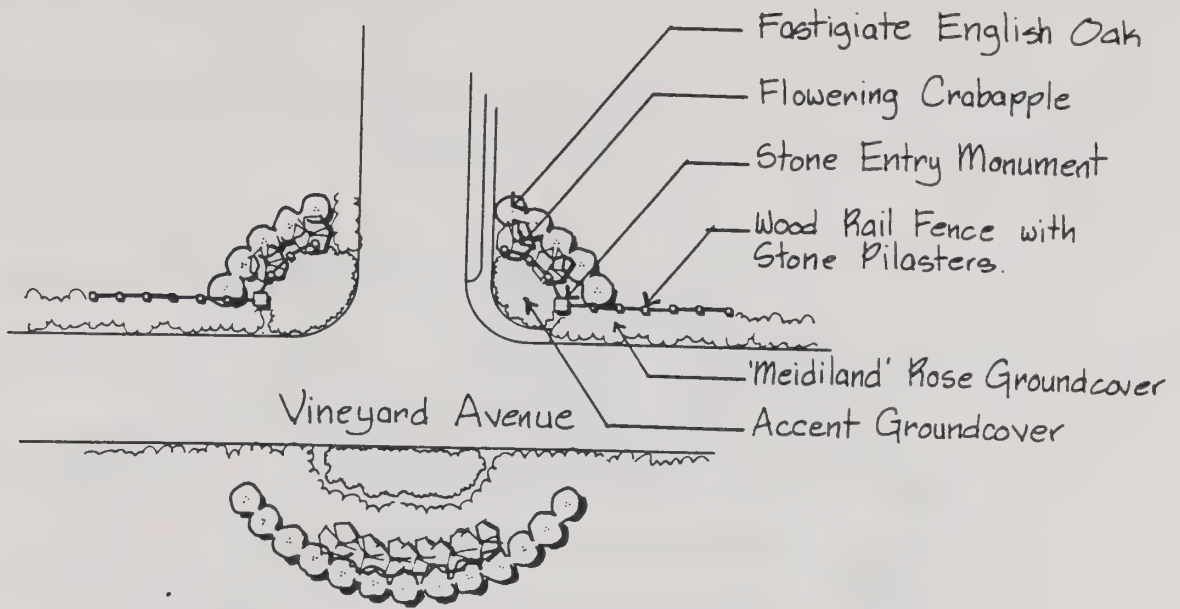
3. Street Entry Landscaping

- a. Neighborhood street entry landscaping should be provided at each street intersection with Vineyard Avenue (Figure V-3). Formal plantings in a semi-circular pattern should be provided to define and accentuate the neighborhood entries.
- b. In MDR Districts, decorative walls, pilasters, archways, and entry monuments of stone construction are encouraged at individual development entries to accentuate the vineyard design theme (Figure V-4).

4. Local and Cul-de-Sac Street Tree-Planting

- a. Dense natural groupings of medium- and large-sized deciduous and evergreen trees should be planted along local and cul-de-sac streets in LDR areas. Tree distances from the edge of roadway should vary to reflect a natural symmetry.
- b. Colorful deciduous trees should be planted in a symmetrical pattern along local and cul-de-sac street in MDR areas.

STREET ENTRY LANDSCAPE DESIGN CONCEPTS



Plan



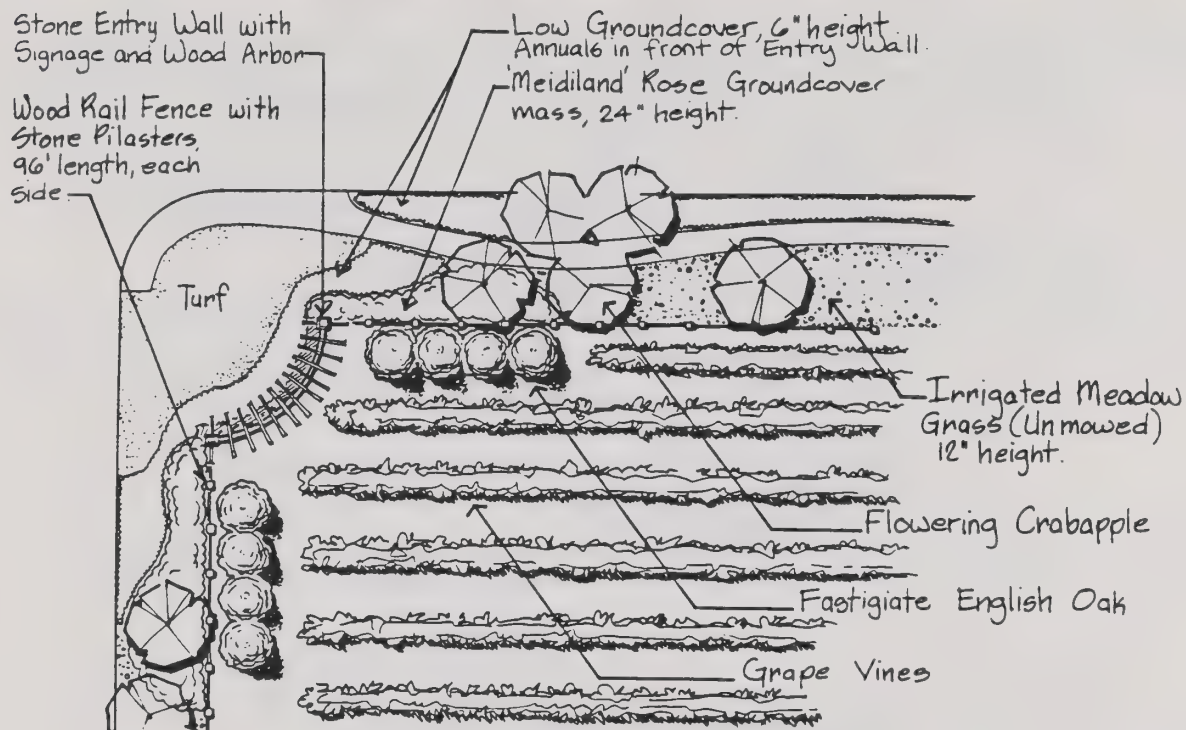
Elevation

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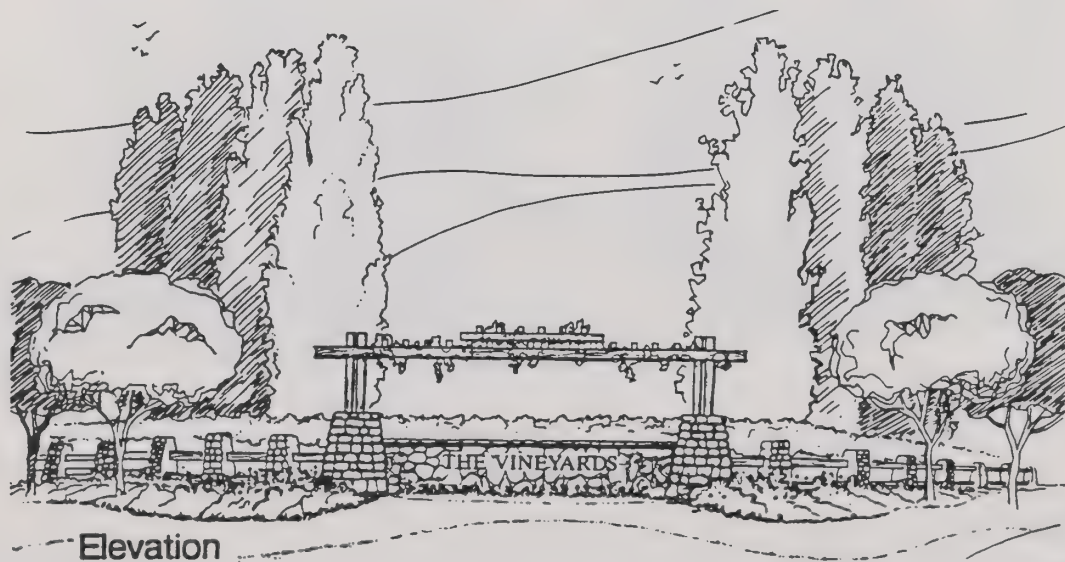
FIGURE V - 3



STREET ENTRY LANDSCAPE DESIGN CONCEPTS



Plan



VHC025.CP / 111988/GS/JLO

FIGURE V - 4



H. TRANSIT SERVICE

In order to provide an alternative to the use of automobiles, the Plan Area should be linked to the local transit system along the realigned Vineyard Avenue and school loop street system and provided with bus stop pull-outs and pedestrian shelters at the community park, school, and applicable local street intersections along the realigned Vineyard Avenue.

I. PEDESTRIAN/BICYCLE/EQUESTRIAN TRAILS

A variety of pedestrian, bicycle, and equestrian trails are planned within the Plan Area. These include:

1. "Existing Vineyard Avenue Alignment" Trail
2. "S-Curve" Trail
3. Realigned Vineyard Avenue Bicycle Route and Multi-Use Trail
4. East Plan Area Trail
5. West Plan Area Trail
6. Lot 3 Trail
7. Neighborhood Trails

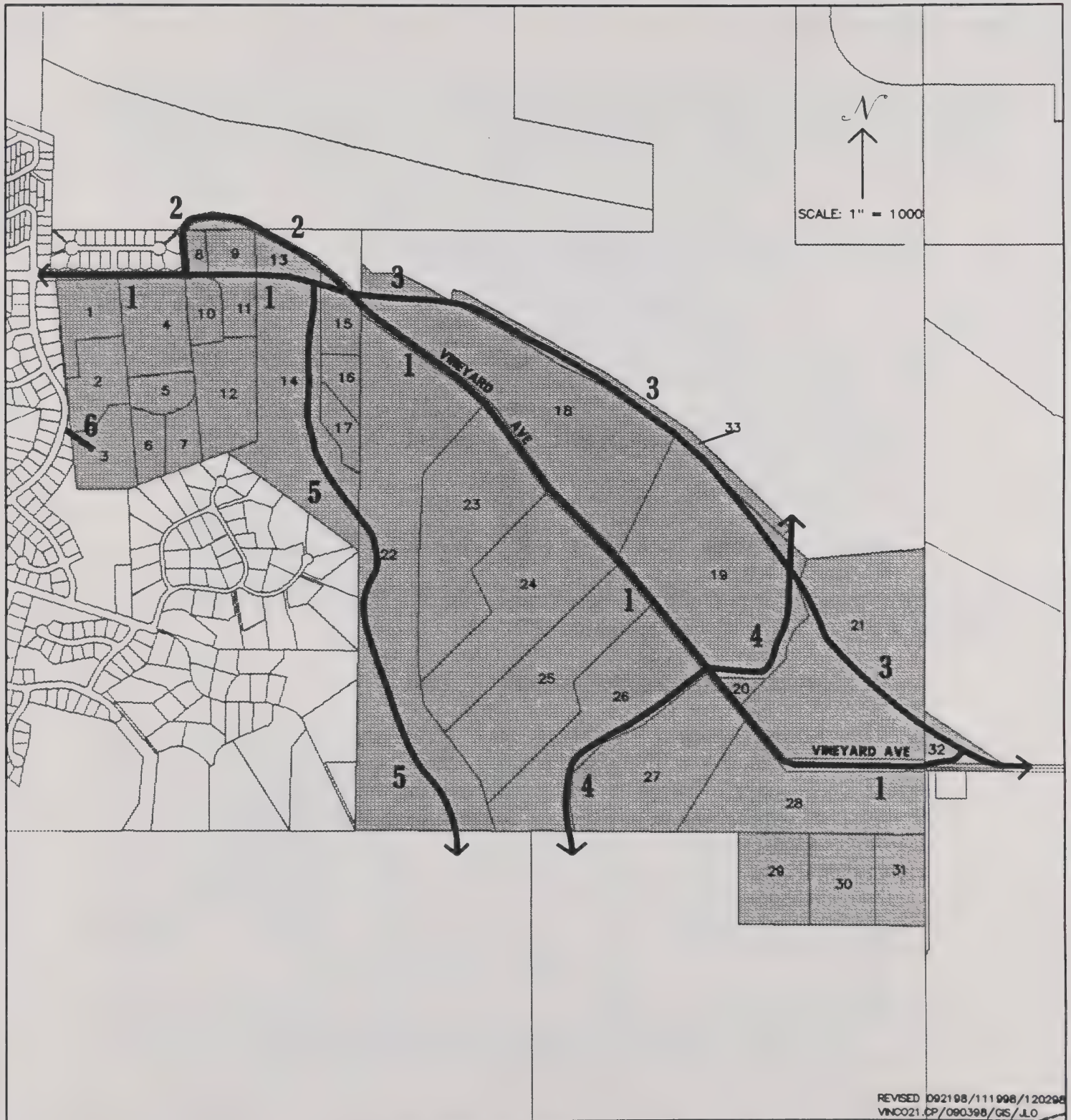
Conceptual alignments for each of the proposed trails within the Plan Area are presented below, illustrated in Figure V-5, and summarized in Table V-2.

1. "Existing Vineyard Avenue Alignment" Trail

Following the realignment of Vineyard Avenue, the existing alignment will be used as an emergency vehicle and utility maintenance vehicle access road and a pedestrian, bicycle, and equestrian corridor. This will enhance safety and allow pedestrians, bicyclists, and equestrians to move more safely through the Plan Area. It will also provide residents with an alternative to driving to school, recreational areas, and neighboring homes. Most residents will live within a short distance from this corridor. A master landscape and trail plan will be prepared for the full length of the existing Vineyard Avenue (including the "S"-Curve section), and trail and landscape improvements will be completed as a shared improvement cost.

In addition, a concrete sidewalk will be constructed along the south side of the existing Vineyard Avenue from the northwest corner of Lot 1 to connect to the eastern end of the "Existing Vineyard Avenue Alignment" Trail at Lot 15.

VINEYARD AVENUE CORRIDOR TRAILS PLAN



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FIGURE V - 5
LEGEND

— PROPOSED TRAIL

1. "Existing Vineyard Avenue Alignment" Trail
2. "S" - Curve Trail

3. "Realigned Vineyard Avenue" Bicycle Route and Multi-Use Trail
4. East Plan Area Trail
5. West Plan Area Trail
6. Lot 3 Trail



**Table V-2
Trails Summary**

Trail Number	Name of Trail	Trail Use	Timing of Construction	Construction By	Trail Width	Trail Material
1	"Existing Vineyard Avenue Alignment" Trail	Pedestrian/ bicycle/ equestrian	At the time Vineyard Avenue is realigned	Plan Area developers	To be determined in accordance with master landscape plan	Asphalt
2	"S"-Curve Trail (mostly existing)	Pedestrian/ Bicycle/ Equestrian	At the time Vineyard Avenue is realigned	Plan Area developers	To be determined in accordance with master landscape plan	Asphalt
3	Realigned Vineyard Avenue Bicycle Route and Multi-Use Trail	Bicycle & Pedestrian/ Bicycle/ Equestrian	At the time Vineyard Avenue is realigned	City/Plan Area developers/ Ruby Hill	6-foot bicycle routes and 6-foot multi-use trail	Asphalt and crushed rock
4	East Plan Area Trail	Pedestrian/ Equestrian	Time of on-site development and connecting trail acquisition	Developer for Lot 19, and City/developer for Lot 26	6 feet	Graded and compacted-earth
5	West Plan Area Trail	Pedestrian/ Equestrian	Time of on-site development and connecting trail acquisition	City for Lot 14 and City/developer for Lot 22	6 feet	Graded and compacted-earth
6	Lot 3 Trail	Pedestrian/ Bicycle	Time of Lot 3 development	Lot 3 developer	16 feet (EVA)	Asphalt
7	Neighborhood Trails	Pedestrian/ Bicycle/ Equestrian	Time of on-site development	Developers	4-6 feet	Asphalt and graded and compacted-earth

2. "S"-Curve Trail

The east/west leg of the former Vineyard Avenue "S"-Curve will be used to provide a direct multi-use trail link between the Shadow Cliffs Regional Recreation Area and the "Existing Vineyard Avenue Alignment" Trail for pedestrians, bicyclists, and equestrians. Trail and landscape improvements will be completed in conjunction with the "Existing Vineyard Avenue Alignment" Trail.

3. Realigned Vineyard Avenue Bicycle Route and Multi-Use Trail

A bicycle route is planned along the realigned Vineyard Avenue roadway. This consists of two six-foot wide paved bike lanes next to the 12-foot wide travel lanes. This route is intended to serve long distance biking needs. A multi-use trail for pedestrians, bicyclists, and equestrians is also planned along the north side of the roadway.

4. East Plan Area Trail

A graded and compacted-earth trail for hikers and equestrians is planned in the eastern portion of the Plan Area. This trail begins at the Realigned Vineyard Avenue Trail described above and extends southerly along the west side of the creek at Lot 19. After crossing the existing Vineyard Avenue, the trail passes through a valley on Lot 26. It is intended to ultimately connect to future regional trails farther to the south. Public access through Lot 26 should be accomplished upon subdivision of this lot and acquisition of connecting trail links to the south needed to complete a loop trail system.

5. West Plan Area Trail

A graded and compacted-earth trail for hikers and equestrians is planned to begin at the east end of the "S"-Curve Trail and connect to a staging area located within the community park. It then extends through the park and into Lot 22 where it continues in a southerly direction to the southern border of the Plan Area. Ultimately, this trail is intended to connect to off-site trails leading to Pleasanton neighborhoods to the west and to a regional trail that extends through Lots 19 and 26 as discussed above. Public access through Lot 22 should be accomplished upon completion of the following: (1) subdivision of Lot 22, (2) completion of the community park trail, and (3) acquisition of connecting trail links to the south needed to complete a loop trail system.

6. Lot 3 Trail

An asphalt paved EVA/trail is planned to connect a future cul-de-sac street on Lot 3 with Montevino Drive. The trail connection will be used for pedestrians and bicyclists.

7. Neighborhood Trails

In conjunction with the above public trails, additional smaller public and private trails should be planned on a project-by-project basis to connect individual developments to this basic trail network, thus creating a well-integrated neighborhood system.

VI. PUBLIC FACILITIES

The following Public Facilities Chapter outlines a plan for providing water, sanitary sewer, storm drainage, and other utility services within the Plan Area. These are presented in terms of existing conditions and planned improvements necessary to support development, consistent with the Land Use Chapter. A methodology for allocating capital costs on a "fair share" basis and the phasing of improvements are detailed in the Infrastructure Financing and Phasing Chapter (Chapter VIII).

A. PUBLIC FACILITIES OBJECTIVES

1. To facilitate the provision of water, sanitary sewer, storm water drainage, and other utility systems within a well-integrated overall network.
2. To facilitate flexibility in the timing and planning of infrastructure improvements.
3. To provide the opportunity for improved water and sanitary sewer service for existing residents within the Plan Area.

B. WATER

The proposed Plan Area water system concept is illustrated in Figure VI-1 and further discussed below.

All existing land uses within the Plan Area are served by small privately owned wells and piping systems. The nearest City water facilities are included in the Bonde Water Pressure Zone located to the south, west, and east of the Plan Area. This pressure zone normally serves connections between 390 and 540 feet in elevation. Bonde Zone pipelines to the west and south exist in Montevino Drive, Foxbrough Place, and Gray Fox Circle and Court. Additional pipelines extend from the City fire station located east of the Plan Area through the Ruby Hill development. Pressure and supply for the Bonde Zone is maintained through a series of water storage tanks and pump stations. One of the storage tanks is situated just beyond the end of Gray Eagle Court, southwest of the Plan Area. An additional tank is located within the Ruby Hill development. The existing tanks and pump stations do not have enough remaining capacity to serve buildout of the entire Specific Plan Area.

Zone 7 constructed a 36-inch water pipeline within the existing Vineyard Avenue right-of-way in late 1993. The City may access this source at approved connection locations for local distribution to customers. Additional distribution lines, valves, pumps and water storage facilities will be required within the Plan Area in order to provide domestic and fire flow services off of the Zone 7 system.

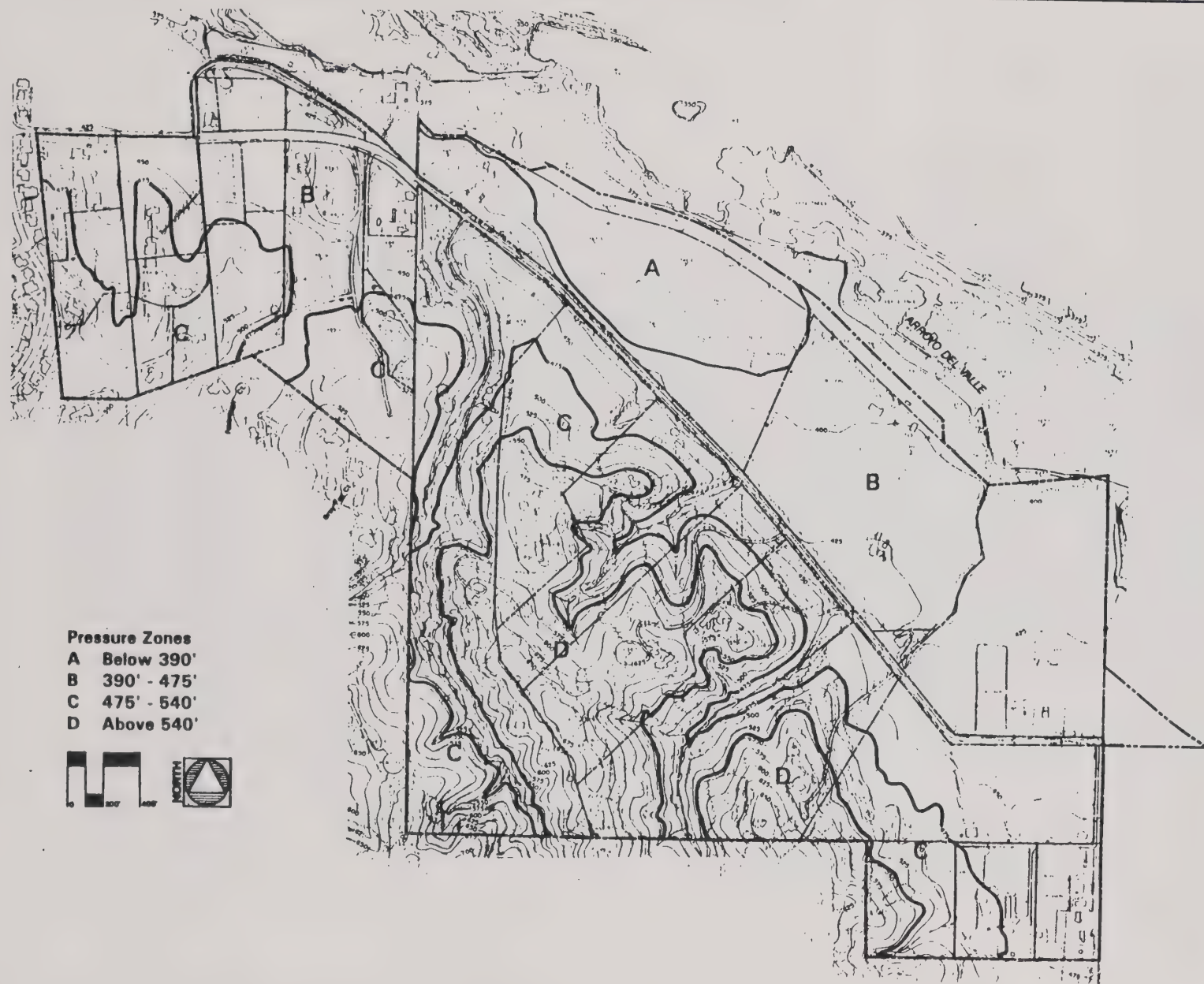


FIGURE VI - 1

WATER PRESSURE ZONES



1. Specific Plan Water System Concept

The City will provide water for all uses, except the irrigation of vineyards and other agricultural activities. Distribution facilities must satisfy minimum design criteria as specified in the "Hillside Water Pressure Zone Master Plan" and be constructed to the specifications of the Public Works Department. The following is a summary of special considerations which must be addressed in providing water service within the Plan Area.

a. Water Pressure

Water connections at different elevations will require different strategies to meet established pressure criteria. The majority of the connections will fall within the normal elevation boundaries of the City's Bonde Zone (390 to 540 feet). It is possible to serve water connections within this range by integrating into the Bonde Zone and providing additional storage and pumping facilities.

The Plan Area has been divided into four elevation bands, as shown in Figure VI-1. Each band has different service considerations. Starting from the lowest elevation band, the methods needed to meet the pressure criteria are as follows:

- Below Elevation 390: The normal lower service level boundary of the Bonde Zone is 390 feet. A portion of Lot 18 located along the north edge of the Plan Area adjoining the Arroyo del Valle is situated as much as seven feet below this boundary. Localized pressure could approach 120 pounds per square inch (psi), but would not exceed the 125 psi maximum allowable limit. A majority of the affected area is designated on the land use plan for Vineyard use. However a limited number of residential units may be affected. Pressure concerns for these homes shall be mitigated by requiring the installation of pressure reducing valves (PRV's) for all connections. Current City standards require the use of this equipment in all situations where localized water pressure is above 80 psi.
- Between Elevation 390 and 475: Service connections within this band will also experience pressures exceeding 80 psi, and will therefore require the installation of PRV's.
- Between Elevation 475 and 540: No special water pressure measures will be needed to serve the planned and existing homes located within this band.

- Above Elevation 540: Homes situated above the normal upper limit of the Bonde Zone will need to take special measures to provide adequate pressure for both domestic and fire fighting needs. To ensure a minimum of 40 psi for domestic needs, a small hydro-pneumatic booster pump system will be required to serve each residence. The pump systems are to be privately owned and maintained. Other special facilities required for fire protection include fire sprinkler systems with control devices to assure adequate storage and pressure. Compliance with fire safety standards will need to be verified by the Fire Marshall prior to the issuance of any new building permits on properties occupied with residences located above elevation 540.

b. Distribution

The recently completed Zone 7 trunk line will be the primary source for providing water to properties within the Plan Area. This treated water source will be accessed through improvements to the existing Zone 7 Turnout #6, located next to the fire station adjacent to the easterly border of the Plan Area (see Figure VI-2). Currently functioning as part of a looped supply to the Ruby Hill pump station, this turnout will be appropriately valved and improved to concurrently supply a new Bonde Zone pump station for the Plan Area. The new pump station will be located adjoining the turnout and fire station, and will feed a 16-inch Bonde Zone trunk line running westerly within the Vineyard Avenue right-of-way.

The new Vineyard Avenue trunk line will extend westerly to connect with the existing 16-inch Bonde Zone line in the vicinity of Lot 15. Valving will be needed at both ends of the system in order to balance the hydraulic pressures and flows. These connections will serve to loop both systems, thereby enhancing the reliability and capacity of each. Secondary distribution lines will extend short distances to the south and north from the main trunk line in order to provide service to all Plan Area properties. In addition, a secondary water line loop connection will be constructed as an independent City project to connect Vineyard Avenue at Lot 14 with Foxbrough Place.

c. Storage

Additional storage to provide adequate domestic service and sustained fire flow capability will be provided by building a new storage tank at elevation 636 on Lot 25. The tank will be sited within the saddle of a ridgeline along the southwest edge of the Plan Area as shown in Figure VI-2. This tank will be of sufficient size to serve local Plan Area properties while enhancing the reliability of the existing Bonde Zone system.

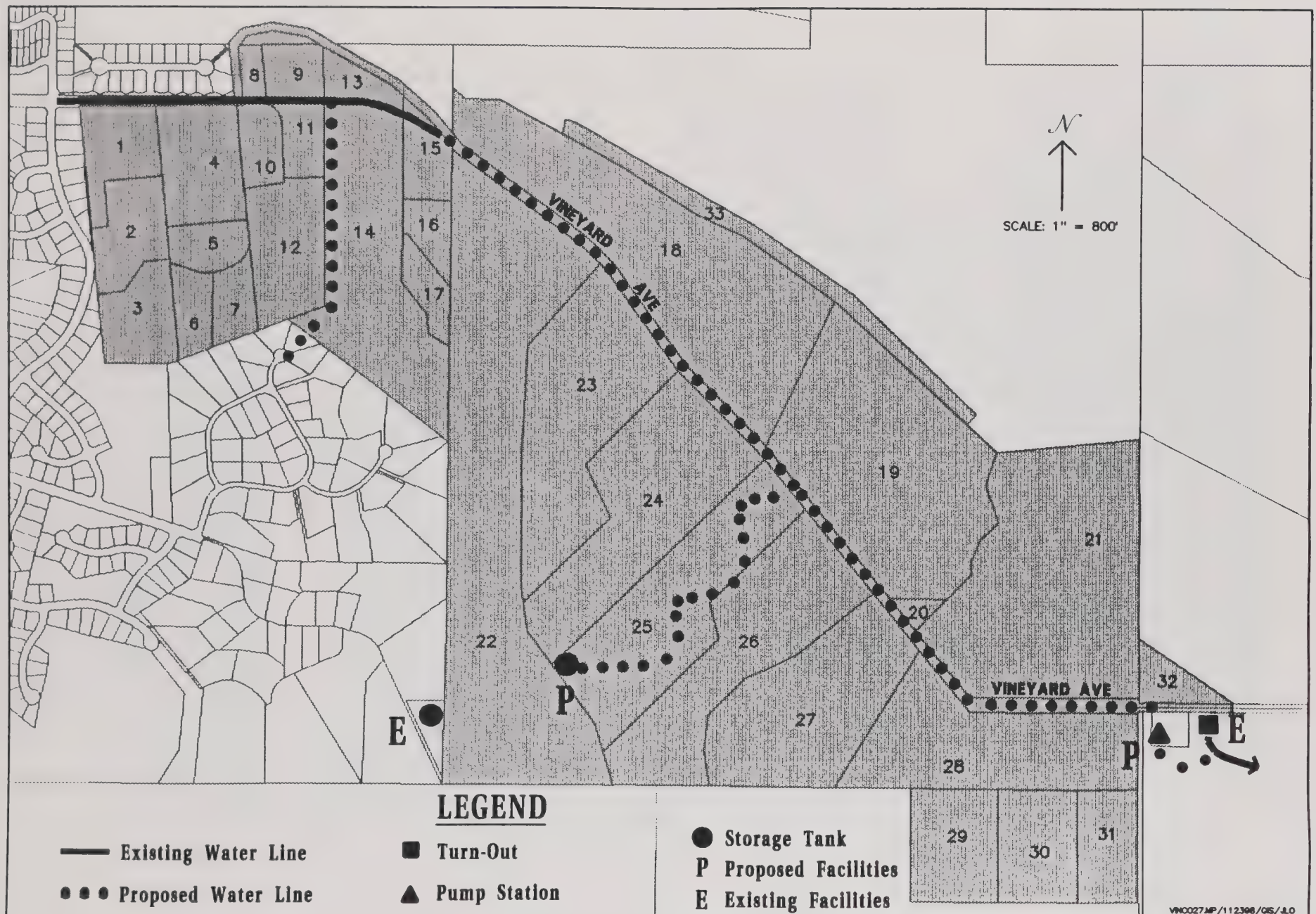


FIGURE VI - 2

WATER SYSTEM PLAN



As part of an integrated system, the new facilities will be sized to deliver a minimum fire flow of 1,500 gallons per minute (gpm), sustained for 2 hours with a residual 20 pounds per square inch pressure (p.s.i.), to residential developments in pressure zones below the 540 foot elevation. Facilities serving the school and limited commercial uses (existing nursery and potential bed-and-breakfast inns, wine-tasting rooms, etc.) will be sized to deliver a fire flow of 2,500 gpm, sustained for 2 hours. Fire hydrants will be spaced at approximately 400-foot intervals on local streets and at strategic locations adjacent to the school and potential commercial buildings.

2. Existing Residences

Existing homeowners choosing to subdivide are required to connect their existing homes to the City water system at the time that service is extended to their subdivided land. Existing homeowners initially choosing not to subdivide will have the option of connecting their homes to the City water system when it becomes available based upon prorata cost sharing (except for Lots 8 and 15 where prior agreements with the City provide otherwise). Well water may be used for irrigation but must be kept separate from the domestic supply through installation of backflow-prevention devices.

3. Water Conservation

Partial mitigation of the cumulative increase in potable water demand will be provided by the following conservation measures:

- a. New development shall install water-conservation devices and utilize drought-tolerant landscaping to the extent feasible.
- b. Well water shall be required for irrigation of vineyards and related agricultural uses.
- c. Drip irrigation systems or other state-of-the-art water conserving measures appropriate for agricultural crop production shall be required for all new vineyards and related agricultural uses, to the extent feasible.

C. SANITARY SEWER

The Plan Area currently has no on-site public sewage collection facilities. Existing homes maintain their own septic disposal systems. The nearest trunk sewer line is located approximately 600 feet west of the Plan Area, just east of Tioga Court. This 8-inch line conveys wastewater to the Cross Town Interceptor located just north of First Street at Vineyard Avenue. The Vineyard Sewer Master Plan Study, completed in 1993 for the City by Carollo Engineers, identified capacity deficiencies in this existing line to meet wet weather flows. The Carollo study recommended construction of a new, larger capacity trunk line to accommodate wet weather flows plus future growth throughout the entire Master Plan area.

Engineering work for Section 1 of a three-part construction program was approved in the City's 1993/94 Capital Improvement Program (CIP). Construction of improvements including an 18-inch parallel sewer trunk line between First Street and Bernal Avenue was funded in the 1995/96 CIP. An easement for this first portion of work is currently being acquired, and construction is scheduled to follow shortly.

Replacement of the remaining segment of the original eight-inch line between Bernal Avenue and Tioga Court (Section 2) was identified in the 1998/99 CIP. Independent review of the sizing for this replacement line was completed for the City by G. S. Dodson & Associates in February of 1998. The Dodson study confirmed the need for a 15-inch diameter pipe at this location. This pipe size is based on a reduced wastewater flow, consistent with development yields reflected in this Specific Plan. Development within the Plan Area will provide a major source of funding for the new line.

The 15-inch diameter Section 3 trunk line will ultimately be extended easterly from Tioga Court along the realigned Vineyard Avenue through the Plan Area to serve future development at the westerly end of Lot 18 will necessitate construction of a pump station and roughly 500-feet of permanent force main. These facilities would be constructed on and adjoining the westerly end of Lot 18 and are in lieu of an otherwise necessary deep sewer identified in the Carollo study (depths of 25-30 feet). The pump station and force main will result in a substantial capital cost savings (with some added operational costs for pumping), while adding flexibility as to the sewer alignment. The new 15-inch line, pump station and force main will have sufficient capacity to accommodate all contemplated uses within the Plan Area.

1. Specific Plan Sewer System Concept

The proposed Plan Area sewer system concept is illustrated in Figure VI-3 and further discussed below.

A system of local 8-inch sewer lines presently serves existing development northwest of the Plan Area. Portions of these lines (within Grape Vine and Badger Drives) have no available surplus capacity. Development of Lots 1-17 must therefore pay for a first, roughly 2,600-foot long segment of the Section Three Master Plan trunk sewer to bypass this constricted local line. This new 15-inch gravity line will extend from a point on the existing Vineyard Avenue at the southwest corner of Lot 8 in a northwesterly direction to the end of the Section 2 improvements (opposite Tioga Court). Development on Lots 1-17 will also facilitate the extension of a local eight-inch sewer line south from the new trunk line (through the community park site at Lot 14) to the existing sewage pump and force main on Foxbrough Place. This connection will be completed through an existing off-site easement, and will enhance overall system reliability and capacity by eliminating the sewage pump and force main at this location and by allowing gravity flow through this new line. Sewer lines on Lots 1, 2, and 3 will gravity flow to the new north-south street on these lots and then north through Vista Diablo.

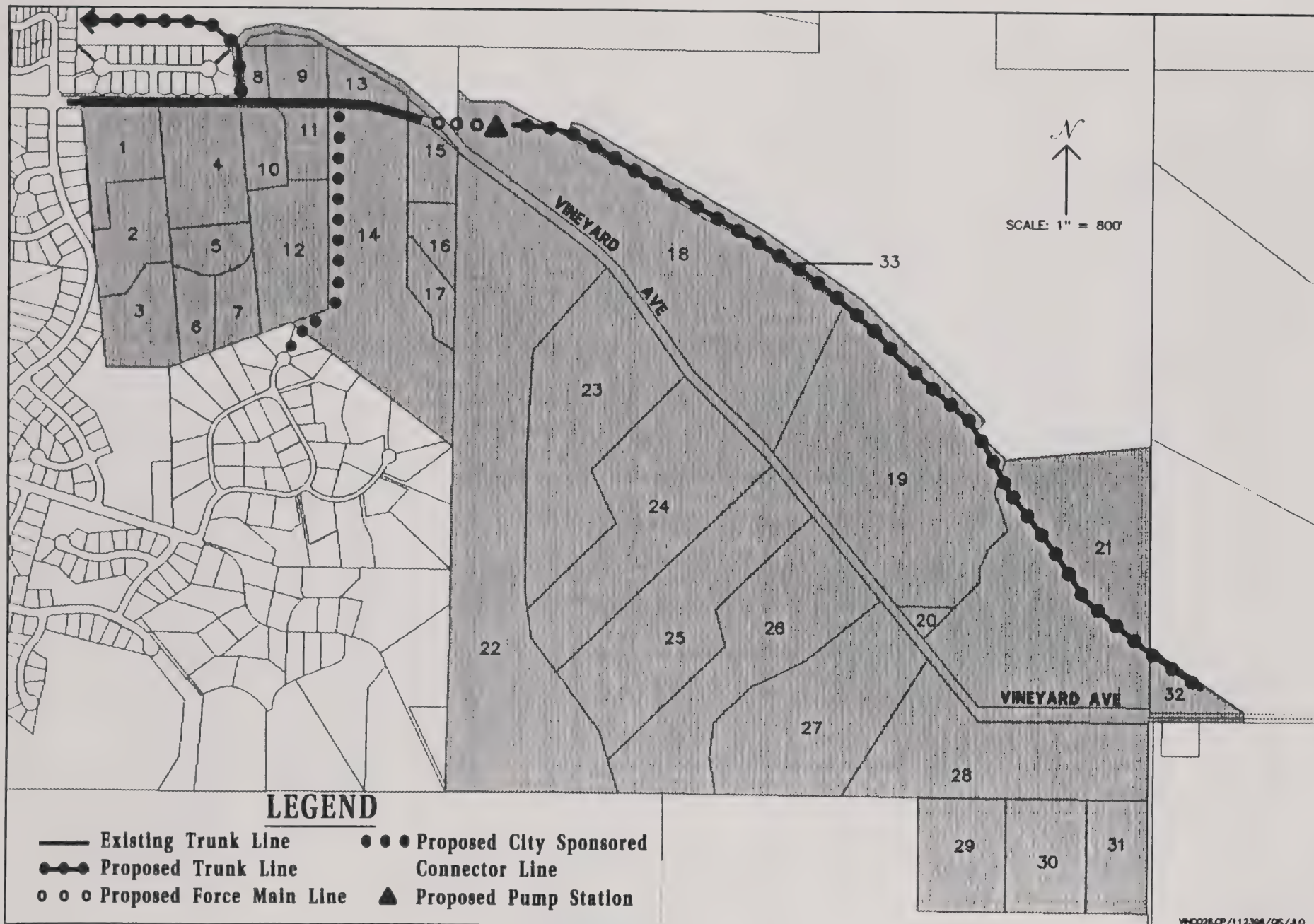


FIGURE VI - 3

SANITARY SEWER SYSTEM PLAN



The elementary school on Vineyard Avenue may be served by one of two alternative means. First, the school project may front the cost of extending the trunk sewer line and installing the pump station and force main at the western portion of Lot 18. Under this scenario the School District would be eligible for reimbursement of expenditures beyond its fair share cost as other properties develop. Second, an on-site holding tank could be installed, with sewage being trucked off-site until the main line and related improvements are extended easterly to the school.

Remaining development within the Plan Area will be dependent on the extension of the 15-inch trunk sewer along the north edge of the Plan Area. Development will also need to install the pump station and force main if not already built with the school project.

2. Existing Residences

Private septic systems in use for existing residences may continue in use in accordance with public health and safety standards. However, these individual systems shall be abandoned as a condition of the subdivision of the lots on which they are located. Upon connection, the existing homes (except for Lots 8 and 15 where prior agreements with the City provide otherwise) will be charged a fair share portion of the cost for new facilities (see Infrastructure Financing Section).

D. STORM DRAINAGE

The City storm drain system is composed primarily of curb inlets, underground pipes, local channels, natural swales and outfall devices. These facilities carry water runoff within the drainage basin to flood control channels, locally known as arroyos. New development is required to install adequately sized storm drain lines to connect to the City's overall drainage system.

The authority for providing flood control service within the Plan Area lies with Zone 7 of the Alameda County Flood Control and Water Conservation District. Zone 7 has no existing or planned facilities within the Specific Plan Area.

1. Specific Plan Storm Drainage Concept

The proposed Plan Area storm drainage concept is illustrated in Figure VI-4 and further discussed below.

Development within the Specific Plan Area will result in an increase in impervious surface areas (building roofs, paved roadways and driveways, etc.). Undeveloped, vegetated lands generally have low runoff coefficients, meaning that they yield a relatively small portion of total rainfall as runoff. The majority of the precipitation, particularly in smaller storms, infiltrates into the subsurface. Impervious surfaces yield

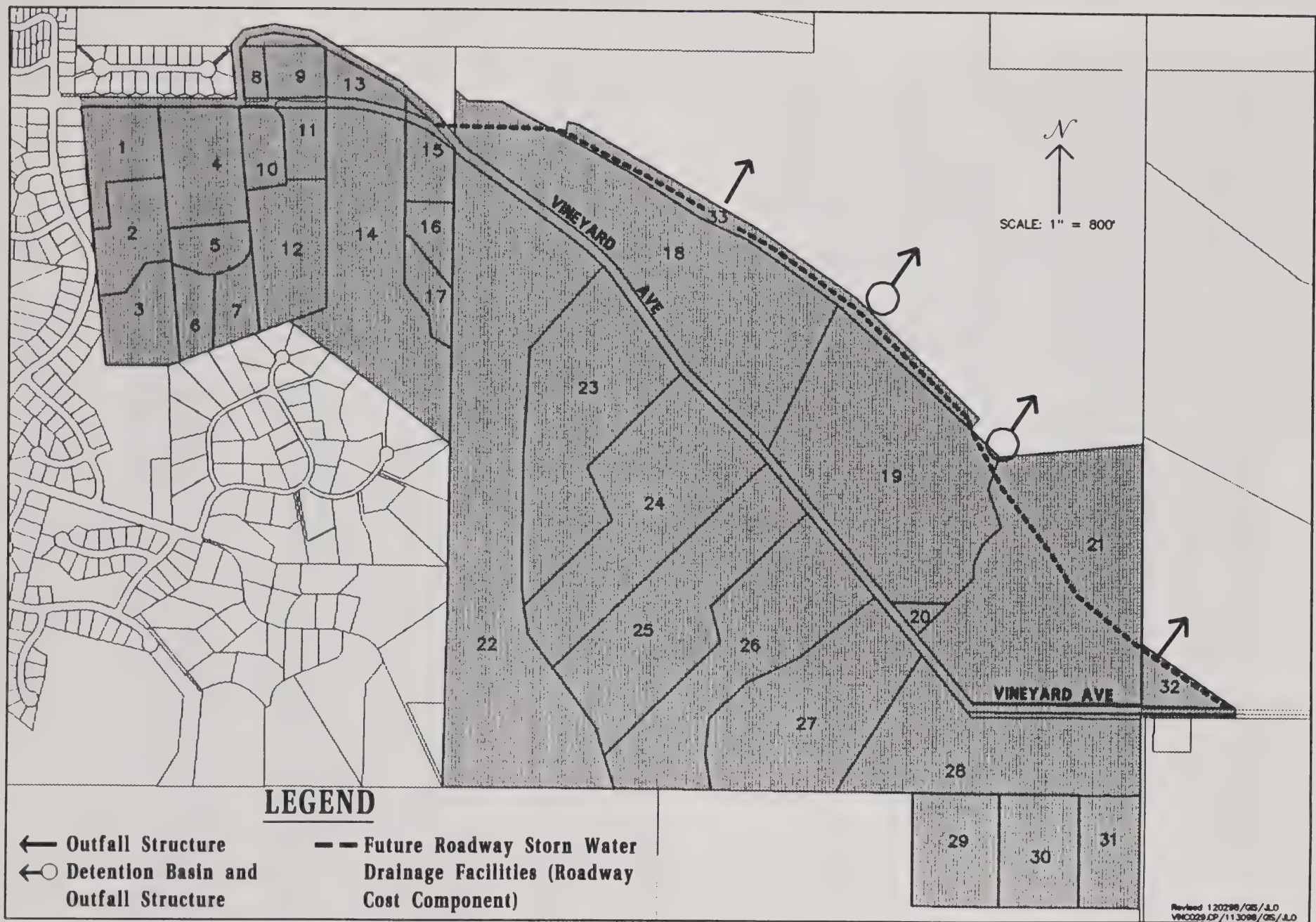


FIGURE VI - 4

DETENTION BASIN COST COMPONENTS



nearly all rainfall as runoff. Increased runoff volumes could exceed the capacity of downstream drainage components causing localized flooding. The following measures will therefore be incorporated into the Plan to mitigate this potential impact:

- a. Each development project shall contribute to the cost of acquiring and constructing common storm water detention facilities located immediately upstream of some proposed outfalls to the Arroyo del Valle. These facilities shall be designed and engineered along with the Vineyard Avenue realignment improvements and may be aggregated for purposes of improving the efficiency of mitigation. Outfalls to the Arroyo shall be provided with appropriate easements, designed subject to City and County standards, and subject to approval by the owners of the land on which they are located. Drainage plans for projects to be developed in advance of the detention basins shall demonstrate that the proposed developments would minimize or eliminate increases in the volume or rate of runoff from the development sites during peak flow periods.
- b. A grading plan shall be submitted for review and approval by the Public Works Department as part of the development review process for each development, including individual vineyards within the Plan Area. The grading plan shall identify features for site drainage, runoff control, and best management practices for the control of erosion and sedimentation.

E. GAS AND ELECTRIC

The Pacific Gas and Electric Company (PG&E) supplies gas and electric service to the Plan Area. A combination of several local electric service lines (12KV) and one electric transmission line (60KV) are presently suspended from power poles throughout the Plan Area.

The existing 12KV line that extends along the existing Vineyard Avenue shall be placed underground and funded as a shared Plan Area improvement. All other 12KV lines shall be undergrounded by the developers of individual projects as development takes place. The existing 60KV transmission is not required by the Specific Plan to be undergrounded, unless otherwise required for construction of the elementary school.

All new 12KV service lines shall be placed underground. A new 12KV line will be placed in the realigned Vineyard Avenue to serve future Plan Area development and funded concurrently with the shared roadway improvements.

Natural gas distribution facilities will be extended from the east side of the Plan Area in order to provide service to local properties. These facilities will be placed within the new Vineyard Avenue right-of-way and will be funded concurrently with the shared roadway improvements. Installation of on-site distribution facilities will be the responsibility of each individual developer.

F. TELEPHONE AND CABLE TELEVISION

Pacific Bell provides telephone service to the Plan Area, and TCI supplies cable television. Existing service is accommodated by overhead wires on poles shared with PG&E along the existing Vineyard Avenue. Both Pacific Bell and TCI plan to expand services in the Plan Area following the same or similar alignments as PG&E (within the new Vineyard Avenue alignment). System expansion costs are generally shared between the service provider and the developer. All service lines are to be placed underground.

G. EMERGENCY AND PERSONAL WIRELESS COMMUNICATIONS FACILITIES

In the future, the need for emergency and personal wireless communication facilities may arise within the Plan Area. Emergency facilities may be constructed on an as-needed basis in any district within the Specific Plan Area in such a way as to serve public safety needs. Personal wireless facilities may be permitted in the Open Space district in accordance with the provisions of the City's Personal Wireless Service Ordinance. Joint use of the City water tank site is encouraged for such facilities, where feasible.

H. FIRE PROTECTION

The Livermore-Pleasanton Fire Department is responsible for providing fire protection and suppression to all areas within the city limits in addition to providing contractual services to a number of developed areas outside the city limits. The Department maintains an existing Fire Station 5 located directly contiguous to the easterly Plan Area boundary (adjoining the Ruby Hill development). There are currently no public fire fighting facilities or fire hydrant systems within most of the Specific Plan Area.

A new water trunk line will be developed within the existing Vineyard Avenue right-of-way, from the fire station (Turnout #6) westerly to connect with the existing line near Pietronave Lane as shown in Figure VI-2. Hydrants will be installed along this new line at locations adjoining proposed new development. This will be a shared Plan Area improvement. In addition, individual developers will be required to provide local facilities both within their projects and in the connecting streets as individual project improvements. Hydrants and supporting facilities will be sized to provide a minimum capacity for residential uses of 1,500 gallons per minute (2,500 gallons per minute for commercial uses) at a minimum of 20 pounds per square inch sustained for two hours. Hydrants are generally installed at 400-foot intervals.

Residences built within the upper Bonde Zone elevations (above 540 feet, as discussed in the Water Service section) will be required to provide individual storage and fire sprinkler systems, subject to approval by the Fire Department.

The owners of Lots 13 through 32 will benefit from the recent construction of City Fire Station 5 by the Ruby Hill developer, and will therefore be subject to reimbursement payments. Following adoption of the Vineyard Corridor Specific Plan, the City will establish an appropriate method of reimbursement, taking into account the number of proposed homes within the Plan Area as well as the proposed park and elementary school.

I. SOLID WASTE DISPOSAL

The Pleasanton Garbage Service provides refuse collection for the Specific Plan Area. Refuse generated by existing and future development will be collected and transported to the North Vasco Landfill located north of Livermore. Monthly charges will be assessed to the user. No new refuse collection or disposal facilities are required to serve the Plan Area.

VII. ENVIRONMENTAL PROTECTION

Project mitigations recommended by the project environmental consultants are included throughout the Specific Plan text. Those pertaining to land use issues are provided in the Land Use Chapter, those relating to circulation are found in the Circulation Chapter, etc. Mitigations relating to the natural environment and archaeological/historical resources are presented below. These pertain to wetlands, wildlife, heritage trees, water quality, and archaeological and historical resources.

A. ENVIRONMENTAL OBJECTIVES

1. Protect special status plant and wildlife species.
2. Permanently preserve significant woodland, riparian habitat areas, wetlands, and wildlife corridors.
3. Preserve and protect existing heritage trees, wherever possible.
4. Protect all known and discovered significant archaeological and historical resources within the Plan Area.

B. WETLANDS

All grading plans shall include a minimum 100-foot setback from intermittent drainages and other seasonal wetlands that are not identified for development in the Specific Plan. The wetlands identified for development in the Specific Plan include the northern portion of the westernmost drainage from approximately 300 feet south of the existing alignment of Vineyard Avenue to Arroyo del Valle to accommodate road crossings and residential development on Lots 18 and 22, the northern portion of the central drainage from the existing alignment of Vineyard Avenue to Arroyo del Valle to accommodate the proposed school on Lots 18 and 19, a 300-foot section of the eastern drainage south of the existing alignment of Vineyard Avenue to accommodate residential development on Lot 27, a 60-foot section of the eastern drainage near the Plan Area's northern boundary to accommodate the realigned Vineyard Avenue crossing, and the majority of the easternmost drainage that ends in a seep south of the existing alignment of Vineyard Avenue on Lot 28 to accommodate residential development.

Measures to minimize erosion and runoff into seasonal drainages shall also be included in all grading plans. Appropriate runoff controls such as berms, storm gates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation and the potential discharge of pollutants into preserved drainages.

Prior to issuance of grading permits for Lots 18, 19, 21, 22, 24, 26, 27, 28, 32, and 33, a qualified biologist shall determine, through the formal Section 404 wetlands delineation process, the extent of jurisdictional wetlands on each lot. Authorization of a Section 404 permit shall be secured from USACE, and a Section 1603 agreement shall be secured from CDFG, if applicable. As part of the permitting process, mitigation of impacts to jurisdictional wetlands shall be identified and implemented. The acreage shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.

C. WILDLIFE

1. In an effort to protect potential red-legged frog species in the Plan Area, all grading plans shall include a minimum 100-foot setback from seasonal ponds that are not identified for development in the Specific Plan. The above wetlands requirements identify all wetlands that would be disturbed with site development, and Exhibit 4.4-1 of the Draft Environmental Impact Report prepared for the project identifies intermittent drainages and other seasonal wetlands. Construction activity occurring within 100 feet of an intermittent drainage may occur only if the drainage is completely dry.
2. All grading plans will include a minimum 100-foot setback from suitable California tiger salamander breeding habitat (i.e., seasonal pond) that is not identified for development in the Specific Plan. The above wetlands requirements identify all wetlands that would be disturbed with site development, and Exhibit 4.4-1 of the Draft Environmental Impact Report prepared for the project identifies intermittent drainages and other seasonal wetlands. For the upland habitat of the California tiger salamander that would be removed with development of the proposed project, an equivalent amount of upland habitat area shall be preserved within the Plan Area. Suitable tiger salamander habitat in the Plan Area includes all areas identified as blue oak woodland or annual grassland. The preserved habitat shall consist entirely of blue oak woodland or annual grassland habitat. All preserved habitat shall be managed and protected, in perpetuity, as natural habitat.
3. In order to protect the riparian habitat associated with the Arroyo del Valle, a 100-foot setback shall generally be established from the top of the south bank of the Arroyo del Valle. No development or construction activities other than trails shall be allowed within the setback area. Fencing shall be placed at the outer edge of the setback area and maintained until all construction activities are completed.

4. When grading of an area of one acre or greater is to occur, or when one or more trees with a trunk diameter of six inches or greater are proposed to be removed during the raptor-nesting season (February 1 to August 31), a focused survey for raptor nests shall be conducted by a qualified biologist during the nesting season. The survey shall be conducted no less than 14 days and no more than 30 days prior to the beginning of grading or tree removal. If nesting raptors are found during the focused survey, no grading or tree removal shall occur within 500 feet of an active nest until the young have fledged (as determined by a qualified biologist), or until the project applicant receives written authorization from CDFG to proceed. If the removal of nest trees is unavoidable, they shall be removed during the non-breeding season.
5. All future bridges over creeks shall be designed to preserve wildlife corridors between the greater Plan Area and the Arroyo del Valle.

D. HERITAGE TREES

1. Existing heritage trees shall be preserved whenever possible. All development shall conform to the City's Heritage Tree Ordinance.
2. Prior to issuance of a grading permits, development applicants shall submit a tree survey to the City Planning Department noting all trees that are six inches in diameter or greater to be removed or disturbed. Grading plans shall specify the precise location of trunk and dripline, size, health, and species of all existing trees with special notation of those classified as heritage trees.
3. Heritage trees not approved for removal that are within 200 feet of grading activity shall be protectively fenced at or beyond the dripline (as determined by a certified arborist). This fence, which is meant to prevent activities that result in soil compaction beneath the canopy cover or over the root zone, shall be maintained until construction activities are completed. No grading, trenching, or movement of construction equipment shall be allowed to occur within fenced areas. Protection of heritage trees on slopes and hillsides will additionally include installation of a silt fence at the upslope base of the protective fence to prevent any soil from drifting down over the root zone.
4. Heritage trees that are removed shall be replaced inch for inch (e.g., removal of a 16-inch tree may be replaced by 16 one-inch or two eight-inch saplings, etc.), or by planting three times the number of individual trees lost, or a combination of both these measures.

E. POTENTIAL ARCHAEOLOGICAL/HISTORICAL RESOURCES

1. If any prehistoric or historic artifacts or other indications of cultural resources are found once project construction is underway, all work must stop within 20 meters (66 feet) of the find. A qualified archaeologist shall be consulted for an immediate evaluation of the find prior to resuming ground-breaking construction activities within 20 meters of the find. If the find is determined to be an important archaeological resource, the resource shall be either avoided, if feasible, or recovered consistent with the requirements of Appendix K of the State California Environmental Quality Act Guidelines.
2. In the event of discovery or recognition of any human remains in any on-site location, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the County Coroner has determined, in accordance with any law concerning investigation of the circumstances, the manner, or the cause of death and has made recommendations concerning treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative.

VIII. INFRASTRUCTURE FINANCING AND PHASING

The following chapter provides coordinated financing and phasing programs intended to facilitate orderly development of the Plan Area infrastructure. Included is an overall approach for apportioning costs associated with shared public improvements on a "fair share" basis among benefiting properties. Also included are phasing plans for the various shared infrastructure improvements. Individual site infrastructure improvements are to be the responsibility of individual project developers.

A. FINANCING AND PHASING OBJECTIVES

1. To implement a fair and equitable method of spreading the costs of financing shared infrastructure improvements.
2. To establish a coordinated and efficient program of phasing infrastructure improvements which allows private development, an elementary school, and a community park to develop in as timely a manner as possible.

B. FINANCING AND PHASING PROGRAM

The Specific Plan financing concept is based upon the assumptions that new development will fund all on-site infrastructure costs required to facilitate Plan Area buildout and a portion of the Sewer Master Plan Section 2 improvements (discussed later in this chapter). The City will fund the cost of off-site traffic mitigation improvements, the through-traffic share of the cost of realigning Vineyard Avenue, and water and sewer line extensions which enhance city-wide service. Based upon the above funding assumptions, coupled with the results of an economic analyses conducted for the project, the number of new homes established for the Plan Area is 189.

In order to fund the major infrastructure components described in the Circulation and Public Facilities Chapters, Plan Area developers will generally be obligated to complete the necessary system components concurrently with their on-site development. In some cases this will result in front-end financing of capital improvements by individual developers which exceed the "fair-share" cost for their projects. Developers who advance funds for this purpose will be eligible for reimbursement as subsequent development takes place. Except for City "front-end" financing of Phase 3 water improvements presented later in this chapter, all reimbursements will be pro-rated and paid out of any net payment of Plan Area infrastructure fees. Reimbursements to the City will be made last.

As Plan Area development occurs, infrastructure system payments will be made based upon initial cost estimates. To the extent that shared infrastructure cost increases may occur, those who develop last will be required to absorb the increase.

Individual developers will be charged a fair share cost for each major infrastructure system, determined as their projects' percentage of the total demand for the various systems. Demand is measured in terms of "equivalent dwelling units" (EDU's) to be served by each new system. An EDU value is also assigned for the proposed elementary school and community park based upon the level of demand represented by the same number of dwelling units. Table VIII-1 presents a schedule of EDU's by land use to be used for the purpose of assigning fair share costs. Developers will be required to pay the assigned cost share for their projects, whether or not they develop to the maximum number of homes or school/park acreage permitted for their properties. Cost-sharing contributions are not required for non-urban land uses designated by the Specific Plan as Open Space and Vineyard.

In addition to the shared public improvements, Plan Area developers will need to provide various facilities which are necessary to complete the infrastructure system to serve their own individual projects. These consist of both on-site roadways, service lines, and related improvements, as well as possible improvements elsewhere within the Plan Area which are needed to serve their projects. The costs of these facilities are independent from and not included in the shared public facilities cost components outlined below.

1. Water System Improvements

Plan Area shared water system improvements as described in Chapter VI include a 16-inch water trunk line in the existing Vineyard Avenue, modifications to Zone 7 Turnout #6, a pump station, and a water tank with supply line. In addition, a secondary water line loop connection between Vineyard Avenue and Foxbrough Place will be constructed by the City. The cost component location and phasing of these improvements are illustrated in Figure VIII-1. Table VIII-2 contains a written summary of cost components, including applicable reimbursements for previously completed trunk line extensions in Vineyard Avenue, and Table VIII-3 contains the water system cost allocations.

Equivalent dwelling unit (EDU) calculations are presented in Table VIII-1. Residential water usage averages 618 gallons per day per dwelling unit. This figure is used as the EDU measurement for water consumption. The 12-acre school site is assigned EDU's which reflect a daily average water demand of 22,557 gallons, or 36.5 EDU's. The EDU assignment for the community park is based on an estimated use of 65,170 gallons per day, resulting in 105.5 EDU's.

**Table VIII-1
Equivalent Dwelling Unit Schedule**

Lot Numbers	Land Use ⁽²⁾	Total Equivalent Dwelling Units Based Upon Demand ¹					
		Water System ⁽³⁾	Sewer System ⁽⁴⁾	Roadway ⁽⁵⁾	Detention Basins ⁽⁶⁾	Utility Under-grounding ⁽⁷⁾	Specific Plan Fee ⁽⁸⁾
1-13, 15-32	Single-Family Residential (per home) ⁽⁹⁾	1.0	1.0	1.0	1.0	1.0	1.0
18a-19a	Elementary School	36.5	18.2	400.0	43.6	19.0	19.0
14	Community Park	105.5	1.8	13.5	3.3	31.7	31.7

- (1) Open Space and Vineyard land (not including the five vineyard estate home sites) are exempt from shared infrastructure cost participation.
- (2) Lot 33 is to be acquired and used for street and other public infrastructure purposes and has no other land use development potential.
- (3) Water system EDU is equal to 618 gallons of water used on an average day by one single-family residence (Draft EIR), or 1.0 EDU. School average daily water usage of 22,557 gallons ÷ 618 gallons = 36.5 total EDU's. Park average daily water usage of 65,170 gallons ÷ 618 gallons = 105.5 total EDU's.
- (4) Sewer system EDU is equal to 220 gallons per day ADWF of sewage generated by one single-family residence (Draft EIR), or 1.0 EDU. School average daily sewage generation of 4,000 gallons ÷ 220 gallons = 18.2 total EDU's. Park average sewage generation of 400 gallons ÷ 220 gallons = 1.8 total EDU's.
- (5) Roadway EDU is equal to the average A.M. and P.M. peak-hour trip generation (1.0) from one single-family residence (Draft EIR), or 1.0 EDU. School demand is equal to the average peak-hour trip generation of 400 trips (754 A.M. and 46 P.M.) ÷ 1.0 trip = 400.0 total EDU's. Park demand is equal to the average A.M. and P.M. peak-hour trip generation of 13.5 trips (9 A.M. and 18 P.M.) ÷ 1.0 trip = 13.5 total EDU's.
- (6) Detention basin EDU is equal to the 6,000 average square feet of impervious surfaces attributable to buildings and non-street pavement per residential lot, or 1.0 EDU, as per City Building Inspection Department. School impervious surfaces of 261,360 square feet (as estimated by School District architect) ÷ 6,000 square feet = 43.6 total EDU's. Park impervious surfaces of 20,000 square feet ÷ 6,000 square feet = 3.3 total EDU's.
- (7) Utility undergrounding costs are spread on the basis of acres per land use planned as follows: one single-family residence is equal to 119 residential acres ÷ 189 new homes = 0.63 acres per home, or 1.0 EDU; school is equal to 12 acres ÷ 0.63 = 19.0 EDU's; and park is equal to 20 acres ÷ 0.63 = 31.7 EDU's.
- (8) Specific Plan Fees are spread on the same basis as utility undergrounding costs.
- (9) Includes five Vineyard housing units.

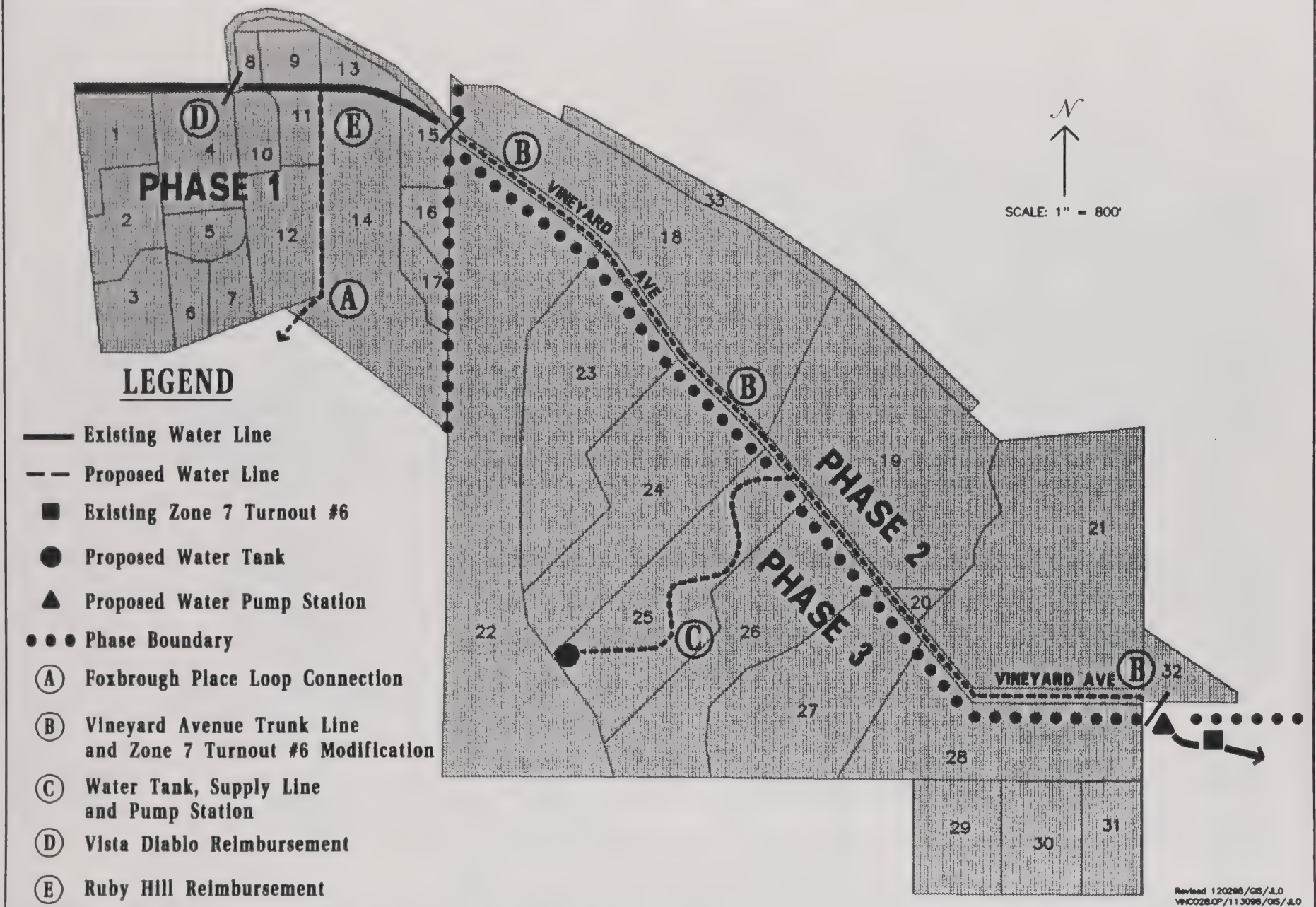


FIGURE VIII - 1

WATER SYSTEM COST COMPONENTS AND PHASING



Table VIII-2
Water System Cost Components
 (Refer to Figure VIII-1)

Phase	Type of New Improvement
Phase 1 (A)	Eight-inch water line loop connection through Lot 14 between Vineyard Avenue and Foxbrough Place (City-funded project).
Phase 2 (B)	Sixteen-inch water trunk line within existing Vineyard Avenue, and Zone 7 Turnout #6 modifications.
Phase 3 (C)	Pump station, water tank (including land purchase), and supply line.
Reimbursement	Type of Improvement
D. Vista Diablo Reimbursement E. Ruby Hill Reimbursement	Reimbursement for water line oversizing which resulted in the required 12-inch water trunk line along Vista Diablo frontage of Vineyard Avenue (from Specific Plan Infrastructure Fee) 100 percent reimbursement for 16-inch water trunk line in Vineyard Avenue "S"-Curve realignment (from Specific Plan Infrastructure Fee)

Table VIII-3
Shared Water System Cost Percentage Allocation

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Total Water System Cost
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	53.5
• 16 existing homes ⁽¹⁾	16.0	4.5
• Elementary school	36.5	10.3
• Community park	105.5	30.0
Contributing Development from <u>Outside</u> Specific Plan Area		
• Costas Property ⁽²⁾	6.0	1.7
Total	353 EDU's	100.0%

Shared water system cost per EDU is equal to 1 EDU ÷ 353 total EDU's, or 0.0028 x total shared water system cost.

Example: Shared water system cost per lot calculation - Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's x 0.0028 x total shared water system cost = shared water system cost for Lot 1. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

⁽¹⁾ This excludes existing homes on Lots 8 and 15 where prior agreements with the City permit hook-up without further payment, and Lot 14 where the existing caretaker's home will be replaced with the community park.

⁽²⁾ The Costas Property is located immediately north of the Plan Area but will benefit from the Plan Area water system improvements. Shared water system cost obligations will be assigned to this property based upon an estimated six total homes, or 6.0 EDU's.

Lots 1 through 17 (Phase 1), located at the westerly end of the Plan Area, may receive interim water service by connecting to the City's existing Bonde Zone Water Pressure System. A 16-inch Bonde Zone trunk line currently extends easterly within Vineyard Avenue to a point near the Phase 1 eastern boundary at Lot 15 as shown in Figure VIII-1. This line will serve a limited number of homes on an interim basis with concurrent completion of a secondary loop. The loop will extend south from Vineyard Avenue through Lot 14 and connect through an existing easement to the northerly end of Foxbrough Place. This project will be funded and undertaken by the City since it serves the overall City-wide system. Reimbursement payments to the Vista Diablo and Ruby Hill developers for previous water trunk line improvements (oversizing and installation, respectively) in Vineyard Avenue will commence at the time that net Plan Area infrastructure fees become available.

Phase 2 water system improvements are intended exclusively to meet the fire flow and limited domestic needs of the elementary school. These improvements include an extension of the 16-inch Bonde Zone trunk line within existing Vineyard Avenue from the Phase 1 eastern boundary to the eastern border of the Plan Area to connect with Zone 7 Turnout #6. Phase 2 improvements do not include the pump station, storage tank, and supply line but would require some additional valving to reduce pressure within the distribution line at a point immediately below the Ruby Hill development. A more detailed hydraulic analysis will be necessary to confirm system performance for Phase 2 (based on fire-flow requirements).

Phase 3 improvements will include a pump station, storage tank, and supply line (as well as the 16-inch Bonde Zone trunk line extension in the event that Phase 2 work is not completed in advance). The Phase 3 pump station, water tank, and supply line are to be funded in advance by the City and timed to coincide with the first residential project in Phase 3. The cost of these improvements are to be reimbursed to the City through a water facility improvement fee with actual funds being credited to the City generally following payment of all other shared Plan Area water system improvement reimbursements. The owner of Lot 25 shall be compensated for the water tank land cost. The water tank access road and supply line easements shall be dedicated to the City as a condition of Lot 25 subdivision map approval.

2. Sanitary Sewer System Improvements

Sanitary sewer system improvements include construction of an 18-inch parallel trunk line from First Street to Bernal Avenue by the City (Sewer Master Plan Section 1), a 15-inch replacement trunk line from Bernal Avenue to Tioga Court (Sewer Master Plan Section 2) with partial funding participation by the City, a new 15-inch trunk line from Tioga Court to Vineyard Avenue at Lot 8, an eight-inch line connecting Foxbrough Place and Vineyard Avenue at the northwest corner of Lot 14 by the City, a new 15-inch trunk line within the full length of the realigned Vineyard Avenue, and a sewage pump station and short segment of force main at the westerly end of Lot 18. The cost component

location and phasing of these improvements are illustrated in Figure VIII-2. Table VIII-4 presents a summary of related cost components, including reimbursement to the developer of Ruby Hill for the previously completed extension of a sewer trunk line within the straightened "S"-Curve portion of Vineyard Avenue. Table VIII-5 contains the sewer system cost allocations.

Sewage discharge from single-family housing in the Plan Area is estimated to average 220 gallons per day per unit, or 1.0 EDU. The 12-acre elementary school is expected to generate approximately 4,000 gallons per day, or 18.2 EDU's. Sewage discharge for the park is estimated at 400 gallons per day which translates into 1.8 EDU's. Equivalent dwelling unit calculations are provided in Table VIII-1 for each applicable Plan Area land use.

Phase 1 of the sewer improvements includes construction of an 18-inch parallel trunk line from First Street to Bernal Avenue (Sewer Master Plan Section 1), and a 15-inch trunk line from Bernal Avenue to Tioga Court (Sewer Master Plan Section 2). It will also require a 15-inch trunk line extension from Tioga Court to the southwest corner of Lot 8. This is necessary to avoid overburdening of existing facilities east of Tioga Court. In addition, an eight-inch connector line will be constructed by the City from Vineyard Avenue through Lot 14 to Foxbrough Place to eliminate the pump station and force main which now serve the Foxbrough Estates areas.

Except for the interim sewer facilities permitted for the school in Phase 2 as outlined in Chapter VI, Phase 3 will require completion of a pump station and force main and extension of the 15-inch trunk line along the new alignment of Vineyard Avenue.

3. Roadway Improvements

Shared public roadway improvements within the Plan Area and reimbursement responsibilities for prior roadway improvements benefiting the Plan Area include the proposed realignment of Vineyard Avenue between the east end of the straightened "S"-Curve section of Vineyard Avenue and the eastern boundary of the Plan Area, trail and landscaping improvements to the existing Vineyard Avenue (including a traffic signal at the intersection with the loop street which borders the west side of the elementary school), reimbursement to the Vista Diablo developer for certain recently completed street improvements along the south side of the Vineyard Avenue centerline at the Vista Diablo frontage, and reimbursement to the Ruby Hill developer for straightening the "S"-Curve segment of Vineyard Avenue. Figure VIII-3 illustrates the shared roadway cost components and phasing, Table VIII-6 contains a summary of related cost components, and Table VIII-7 contains the roadway system cost allocations.

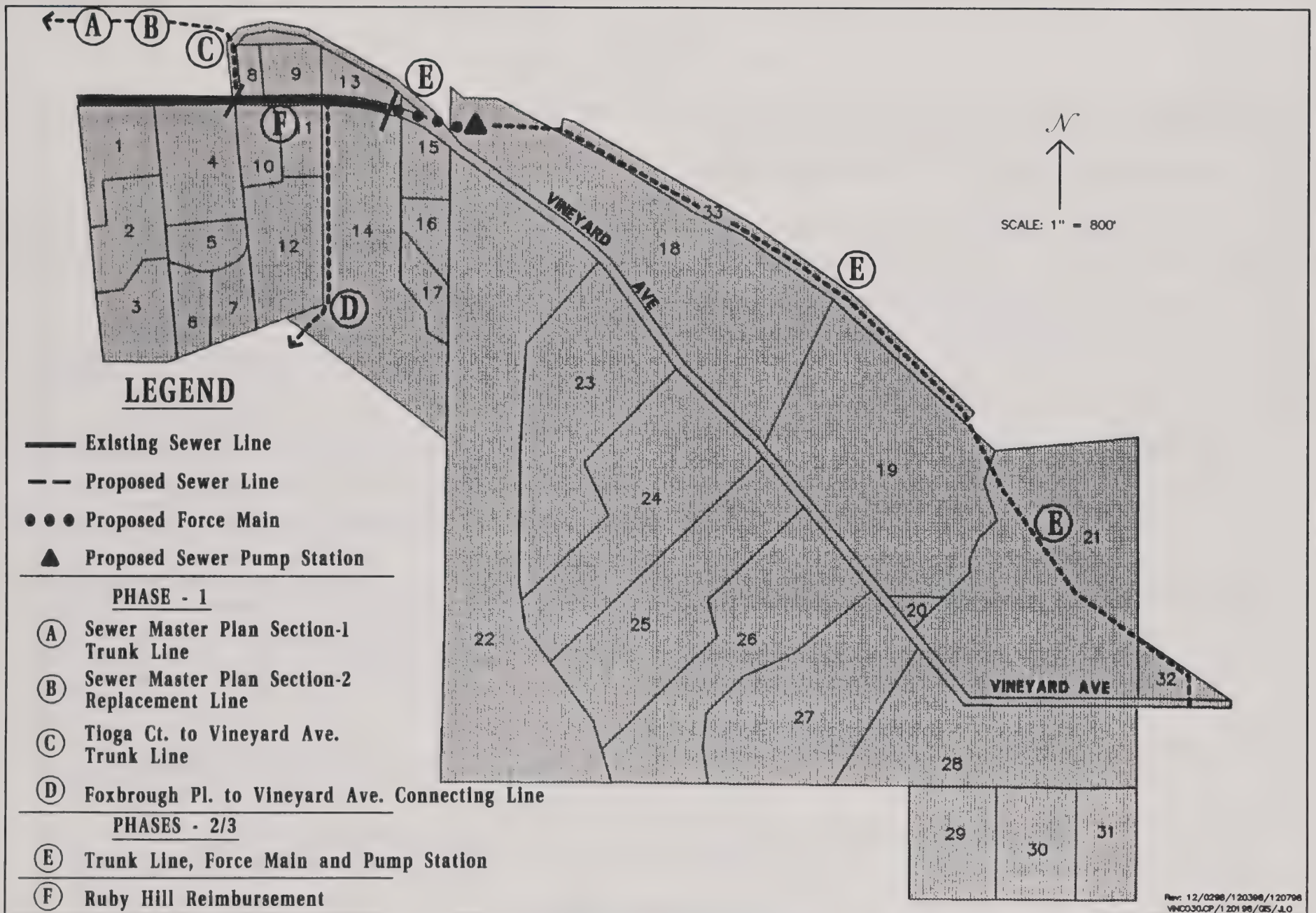


FIGURE VIII - 2

SEWER SYSTEM COST COMPONENTS AND PHASING



Table VIII-4
Sewer System Cost Components
(Refer to Figure VIII-2)

Phase	Type of New Improvement
Phase 1 A. Sewer Master Plan Section 1 B. Sewer Master Plan Section 2 C. Tioga Court to Vineyard Avenue trunk line D. Foxbrough Place to Vineyard Avenue connecting line Phase 2 (alternative sewer facilities for school) Phase 3 E. Vineyard Avenue trunk line, pump station, and force main	Eighteen-inch parallel trunk line from First Street to Bernal Avenue (City-funded project). Fifteen-inch replacement trunk line from Bernal Avenue to Tioga Court (partially City-funded project). New 15-inch trunk line from Tioga Court to southwest corner of Lot 8 at Vineyard Avenue. Eight-inch connector line from northwest corner of Lot 14 at Vineyard Avenue to Foxbrough Place (City-funded project). Same as Phase 3 improvements below <u>or</u> interim sewage holding tank at school site Fifteen-inch trunk line within realigned Vineyard Avenue from Phase 1 eastern boundary to eastern boundary of Plan Area, including laterals, manholes, pump station, and force main.
Reimbursement	Type of Improvement
F. Ruby Hill reimbursement	Fifteen-inch trunk line previously installed as part of Vineyard Avenue "S"-Curve straightening project.

**Table VIII-5
Shared Sewer System Cost Allocation**

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Total Sewer System Cost
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	81.1
• 16 existing homes ⁽¹⁾	16.0	6.9
• Elementary school	18.2	7.8
• Community park	1.8	0.8
Contributing Development from <u>Outside</u> Specific Plan Area		
• Costas Property ⁽²⁾	6.0	2.6
• Fire Station 5 (Ruby Hill) ⁽³⁾	2.0	0.8
Total	233 EDU's	100.0%

Shared sewer system cost per EDU is equal to $1 \text{ EDU} \div 233 \text{ total EDU's}$, or $0.0043 \times \text{total shared sewer system cost}$.

Example: Shared sewer system cost per lot calculation: Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's $\times 0.0043 \times \text{total shared sewer system cost} = \text{shared water system cost for Lot 1}$. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

-
- (1) This excludes existing homes on Lots 8 and 15 where prior agreements with the City permit hook-up without further payment, and Lot 14 where the existing caretaker's home will be replaced with the community park.
- (2) The Costas Property is located immediately north of the Plan Area but will benefit from the Plan Area sewer system improvements. Shared sewer system cost obligations will be assigned to this property based upon an estimated six total homes, or 6.0 EDU's.
- (3) Fire Station 5 (Ruby Hill) is located immediately east of the Plan Area but will benefit from the Plan Area sewer system improvements since it will be required to abandon its existing septic system and connect to the new trunk line planned in the realigned Vineyard Avenue. Shared sewer system cost obligations will be assigned to the station based on an estimated average daily sewage generation of 440 gallons, or 2.0 EDU's.

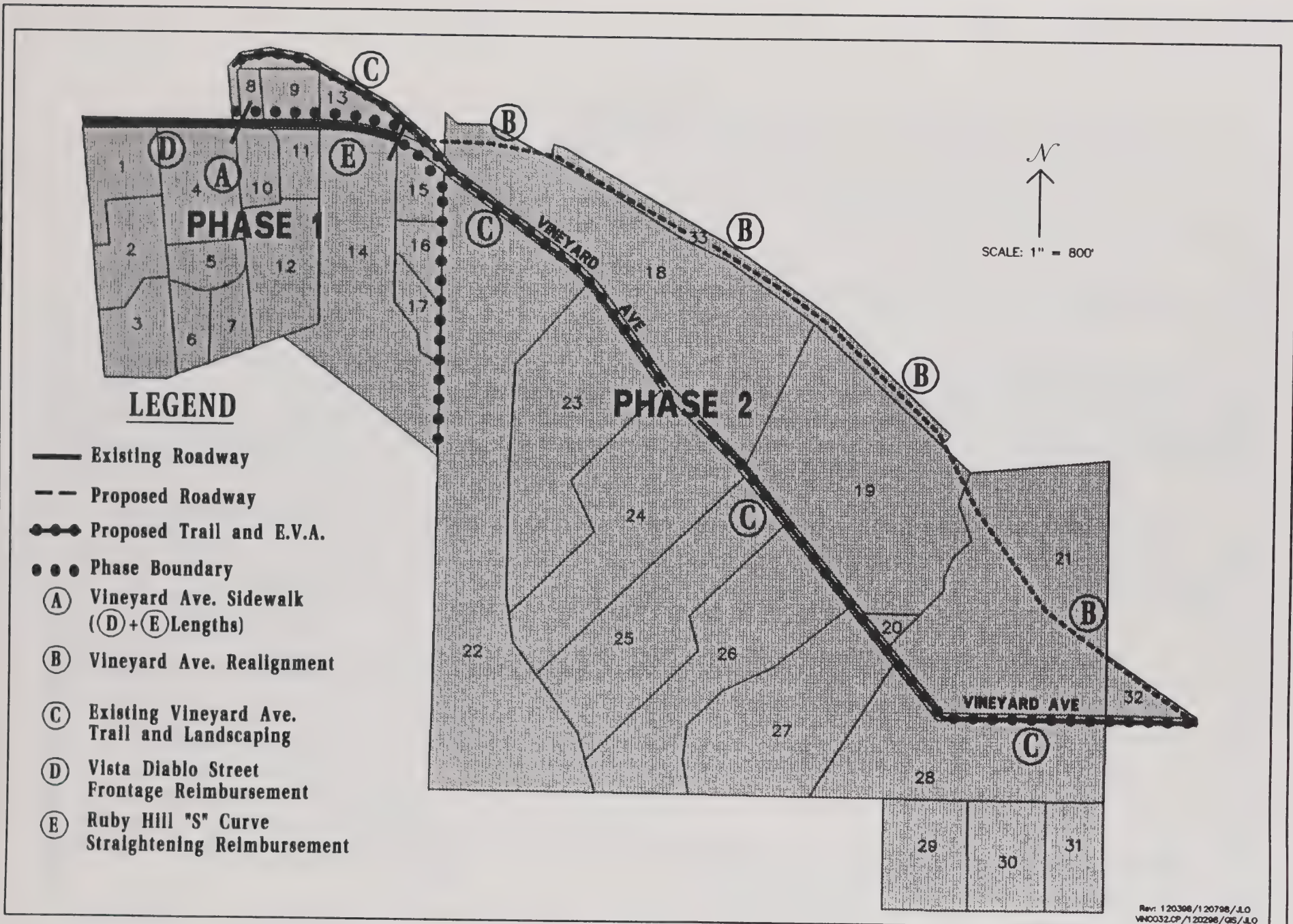


FIGURE VIII - 3

ROADWAY COST COMPONENTS AND PHASING



**Table VIII-6
Roadway Cost Components
(Refer to Figure VIII-3)**

Phase	Type of New Improvement
Phase 1 A. Sidewalk improvements to Vineyard Avenue	Completion of sidewalk along the south side of Vineyard Avenue from Lot 1 to the planned abandoned section of Vineyard Avenue starting at Lot 15.
Phase 2 B. Vineyard Avenue realignment C. Existing Vineyard Avenue improvements	Realignment of Vineyard Avenue from the east end of the "S"-Curve to the eastern Plan Area boundary (including purchase of Lot 33), and traffic signal. Trail and landscape improvements to the existing Vineyard Avenue section between the northwest corner of Lot 8 ("S"-Curve) and the eastern border of the Plan Area.
Reimbursement	Type of Improvement
D. Vista Diablo reimbursement E. Ruby Hill reimbursement	Street widening improvements along the south side of the Vineyard Avenue centerline at the Vista Diablo frontage. "S"-Curve straightening improvements.

Table VIII-7
Shared Roadway System Cost Allocation

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Total Roadway System Cost⁽³⁾
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	18.6
• Elementary school	400.0	39.4
• Community park	13.5	1.3
Contributing Development from <u>Outside</u> Specific Plan Area		
• Costas Property ⁽¹⁾	6.0	0.6
• Ruby Hill ⁽²⁾	-	40.0
Total	608.5 EDU's	100.0%

Shared roadway system cost per EDU is equal to 1 EDU ÷ 1,402 total EDU's, or 0.0007 x total shared roadway system cost.

Example: Shared roadway system cost per lot calculation - Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's x 0.0007 x total shared roadway system cost = shared roadway system cost for Lot 1. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

⁽¹⁾ The Costas Property is located immediately north of the Plan Area but will benefit from the Plan Area public roadway system improvements. Shared roadway system cost obligations will be assigned to this property based upon an estimated six total homes, or 6.0 EDU's.

⁽²⁾ The Ruby Hill Pre-annexation Agreement requires the developer (Signature Properties) to participate in the cost of improving Vineyard Avenue within the Vineyard Avenue Specific Plan Area. Ruby Hill's cost share will be 40 percent of the total Vineyard Avenue realignment cost, based upon the average A.M./P.M. peak-hour traffic flow through the Plan Area traffic measurement point at Vineyard Avenue/Montevino Drive relative to the Specific Plan-generated traffic past this point. [Specific Plan traffic passing Montevino: Vineyard Residential - 340 combined AM/PM trips, 250 of which pass Montevino; Community Park - 27 total trips, none of which pass Montevino; Costas - 11 combined AM/PM trips, 11 of which pass Montevino; total Specific Plan (plus Costas) trips passing Montevino = 669 trips, or 60%. Ruby Hill traffic passing Montevino: 850 homes - 364 trips pass Montevino; Ruby Hill winery - 40 trips pass Montevino; Ruby Hill golf course - 35 trips pass Montevino; total Ruby Hill trips passing Montevino = 439 trips, or 40%.]

⁽³⁾ City may share additionally in the Specific Plan Area roadway cost if the subsequent economic analysis shows that the cost burden for streets and all other shared infrastructure cannot be borne by all Specific Plan Area development.

The EDU calculations shown in Table VIII-1 reflect the average A.M./P.M. peak-hour vehicular trip generation of 1.0 trip per residential unit, or 1.0 EDU; 400 trips, or 400 EDU's for the elementary school; and 13.5 trips, or 13.5 EDU's for the community park. The average A.M./P.M. peak-hour calculation is used because it best reflects actual roadway demand during the two periods of the day when roadway capacity is the most utilized. For residential, the A.M. and P.M. peaks are both approximately 1.0 trip with an average of 1.0. The proposed community park is planned to provide primarily leisure activities, and, therefore, the traffic it generates at both the A.M. and P.M. peaks is minimal (13.5 trips averaged). However, the elementary school is projected to generate 754 A.M. peak-hour trips but only 46 P.M. peak-hour trips. Therefore, the average, or 400 trips, best represents the school's effect on street capacity and its cost participation. In addition, the Ruby Hill Pre-annexation Agreement requires the developer (Signature Properties) to participate in the cost of improving Vineyard Avenue within the Vineyard Avenue Specific Plan Area. Ruby Hill's cost share will be 56.6 percent of the total Vineyard Avenue realignment cost, or 793.5 EDU's.

Phase 1 roadway improvements will involve the initiation of reimbursement payments to the Vista Diablo and Ruby Hill developers for past improvements that they funded for portions of Vineyard Avenue within the Plan Area. Reimbursement will continue to the time of Specific Plan Area buildout. Phase 1 will also include construction of a sidewalk along the south side of Vineyard Avenue from the western border of the Plan Area eastward to the beginning of the abandoned Vineyard Avenue section of roadway at Lot 15.

Phase 2 includes completion of the Vineyard Avenue realignment east of the "S"-Curve. This is required to take place prior to final subdivision map recordation for residential or bed-and-breakfast inn development on any of the following lots: Lots 19-21 and 25-32. In addition, trail and landscape improvements will be made to the existing Vineyard Avenue alignment between the northwest corner of Lot 8 and the eastern border of the Plan Area.

The owners of Lots 1, 4, 18, 19, 21 and 32 will be required to dedicate the land required for the Vineyard Avenue street right-of-way on their properties as a condition of subdivision map approval for their properties. This will be considered a non-reimbursable dedication in accordance with City standard subdivision land dedication policy. However, since the right-of-way within Lot 33 will be used solely for street and infrastructure improvements, it will be subject to full reimbursement of land cost in conjunction with the roadway cost-sharing apportionment program. A right-of-way payment will be due to any property owner who is impacted by this right-of-way acquisition program and either has no intention to develop or has no possibility to develop. The right-of-way payment will be due to such property owner at the time of right-of-way acquisition. However, if a property owner in receipt of a right-of-way payment subdivides within 15 years of the funding agreement, the right-of-way payment with interest shall be refunded to the funding developers.

All Plan Area streets which provide direct access to new development are considered to be local serving. The City encourages joint financing of jointly used local streets (e.g., Clara Lane). When a project develops a local street which benefits adjoining properties, a reimbursement agreement should be used based upon standard mechanisms for determining joint use eligibility and repayment responsibilities.

4. Detention Basin Improvements

Shared detention basin and outfall structure costs for the Specific Plan Area are broken out separately from the street improvements. These costs are limited to facilities located within or adjoining the realigned Vineyard Avenue, which include one or more detention basins to be located adjacent to the roadway and a total of four new outfall structures for storm water discharge into the Arroyo del Valle. The components of shared public storm drainage system improvements for the Plan Area are illustrated in Figure VI-4 (in the Public Facilities Chapter), and Table VIII-8 contains the system cost allocations.

Detention basin EDU calculations are presented in Table VIII-1. EDU's are based upon an average of 6,000 square feet of impervious surface per residential lot, or 1.0 EDU. The elementary school calculation is based upon an estimate of 261,360 square feet of impervious surface on 12 acres for a total of 43.6 EDU's, and the park calculation is based on an estimate of 20,000 square feet on 20 acres for a total of 3.3 EDU's.

Detention basin and outfall structure improvements are planned to occur in a single phase at the same time that Vineyard Avenue is realigned.

5. Utility Undergrounding

Required Plan Area utility undergrounding improvements include the undergrounding of all existing power lines with a capacity of 12KV and less. The cost components and phasing of shared utility undergrounding required along Vineyard Avenue are presented in Figure VIII-4, and the cost allocations are provided in Table VIII-9. The undergrounding of on-site lines are to be undertaken by individual project developers and are, therefore, not included in these estimates.

Utility undergrounding EDU calculations are presented in Table VIII-1. EDU's are determined on the basis of acres per land use planned as follows: 119 acres of residential land with 189 new homes ($119 \text{ acres} \div 189 \text{ homes} = 0.63 \text{ acres per home}$), or 1.0 EDU per home; 12 acres of school site divided by 0.63 acres per home for a total of 19.0 EDU's; and 20 acres of park site divided by 0.63 acres per home for a total of 31.7 EDU's.

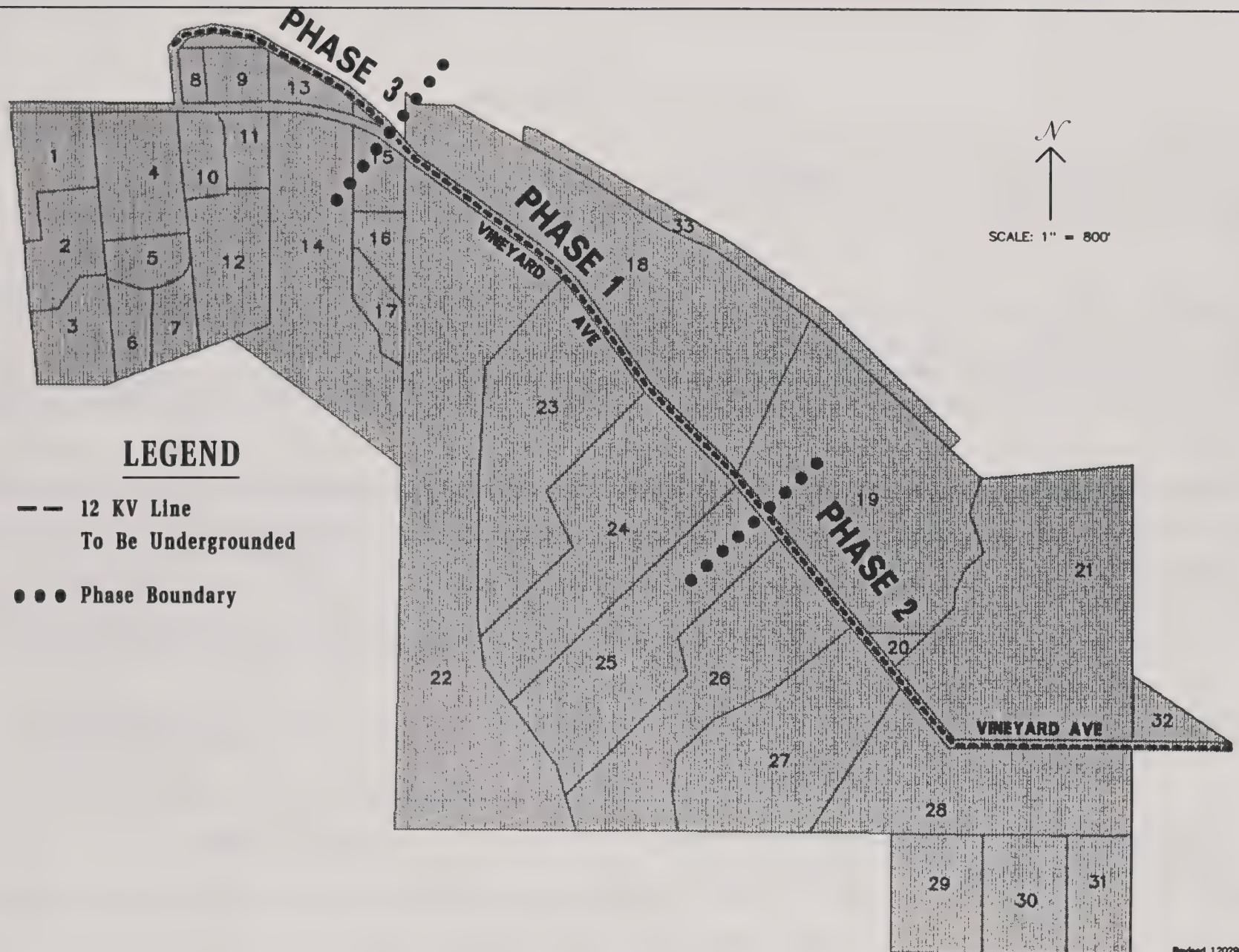


FIGURE VIII - 4

UTILITY UNDERGROUNDING COST COMPONENTS AND PHASING



Table VIII-8
Shared Detention Basin System Cost Allocation

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Total Detention Basin System Cost
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	78.1
• Elementary school	43.6	18.0
• Community park	3.3	1.4
Contributing Development from <u>Outside</u> Specific Plan Area		
• Costas Property ⁽¹⁾	6.0	2.5
Total	241.9 EDU's	100.0%

Shared detention basin system cost per EDU is equal to 1 EDU ÷ 241.9 total EDU's, or 0.0041 x total shared detention basin system cost.

Example: Shared detention basin system cost per lot calculation - Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's x 0.0041 x total shared detention basin system cost = shared detention basin system cost for Lot 1. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

⁽¹⁾ The Costas Property is located immediately north of the Plan Area but will benefit from the Plan Area detention basin system improvements. Shared detention basin system cost obligations will be assigned to this property based upon an estimated six total homes, or 6.0 EDU's.

Table VIII-9
Shared Utility Undergrounding Cost Allocation

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Total Utility Undergrounding Cost
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	71.7
• 18 existing homes	19.0	7.2
• Elementary school	31.7	12.0
• Community park		
Contributing Development from <u>Outside</u> Specific Plan Area	6.0	2.3
• Costas Property ⁽¹⁾		
Total	263.7 EDU's	100.0%

Shared utility undergrounding system cost per EDU is equal to 1 EDU ÷ 263.7 total EDU's, or 0.0038 x total shared utility undergrounding cost.

Example: Shared utility undergrounding cost per lot calculation - Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's x 0.0038 x total shared utility undergrounding cost = shared utility undergrounding cost for Lot 1. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

⁽¹⁾ The Costas Property is located immediately north of the Plan Area but will benefit from the Plan Area utility undergrounding. Shared utility undergrounding cost obligations will be assigned to this property based upon an estimated six total homes, or 6.0 EDU's.

The undergrounding of utilities will take place in three phases as a function of deriving the greatest visual impact. Each phase is to start as soon as financial resources become available through development cost-share funding. Phase 1 includes the undergrounding of the 12KV line located along the existing Vineyard Avenue between the western border of Lot 18 and the eastern border of the school site. Phase 2 includes the 12KV line located between the eastern border of the school site and the eastern border of the Plan Area. Phase 3, which will be viewed the least, includes the 12KV line located along the old "S"-Curve portion of Vineyard Avenue from the western border of the Plan Area to the western border of Lot 18.

6. Specific Plan Preparation Fee

Each subdivider of property within the Plan Area shall be subject to payment of the Vineyard Avenue Corridor Specific Plan preparation fee. The purpose of this fee is to help defray the cost to the City of preparing the Specific Plan, Environmental Impact Report, and supporting economic analysis reports.

Individual fee payments are based upon the relative benefit derived from the Specific Plan for residential, school, and park uses as a function of EDU's for acres planned (the same method as used for determining utility undergrounding costs). EDU calculations are presented in Table VIII-1, and cost allocations are shown in Table VIII-10.

This cost component is to be paid for each development project prior to final subdivision map recordation. It is to be collected for a period of fifteen years following the date of Specific Plan adoption by the City Council. Any property owner who has not filed a final subdivision map within this 15-year period will not be obligated to pay the Fee.

Table VIII-10
Specific Plan Preparation Fee Percentage Cost Breakdown

Funding Contributors	Total Equivalent Dwelling Units (EDU's)	Percent of Specific Plan Fee
Contributing Development from <u>Inside</u> Specific Plan Area		
• 189 new homes	189.0	78.8
• Elementary school	19.0	8.0
• Community park	31.7	13.2
Total	239.7 EDU's	100.0%

Specific Plan Preparation Fee cost per EDU is equal to 1 EDU ÷ 239.7 total EDU's, or 0.0042 x total Specific Plan Preparation Fee cost.

Example: Specific Plan Preparation Fee cost per lot calculation - Lot 1 contains no existing homes and is planned for six new homes (Table IV-1); therefore, six homes, or 6.0 EDU's x 0.0042 x total Specific Plan Preparation Fee cost = Specific Plan Preparation Fee cost for Lot 1. The developer of Lot 1 must pay this amount at the time of final subdivision map recordation for this lot, or the issuance of the first building permit for a habitable dwelling, whichever comes first. This amount is required to be paid regardless of how many homes (more or fewer) are ultimately developed on Lot 1.

IX. GENERAL PLAN RELATIONSHIP AND OTHER JURISDICTIONAL POLICIES AND REGULATIONS

The Specific Plan Area is subject to various policies and regulations as set forth within the Plan as well as with the City's General Plan and other City regulations. Planning for the future land use and development of the Plan Area also requires consideration of County policies established for adjacent unincorporated areas, and policies of other regulatory agencies. Plans and policies relevant to the Specific Plan Area are summarized below.

A. CITY OF PLEASANTON GENERAL PLAN

The Pleasanton General Plan is the primary City planning document with which all other City ordinances, regulations, policies, and programs must be consistent. The key General Plan policies and programs which relate to the Specific Plan are presented below. These are to be implemented equally along with other applicable General Plan provisions for individual development projects within the Plan Area.

Key General Plan Policies and Programs

Numerous General Plan policies and programs apply directly to the Specific Plan Project. Those which will have a key influence on the Plan are presented below.

1. Land Use Element

Policy 2: Develop new housing in infill and peripheral areas which is adjacent to existing residential development.

Program 2.1: Zone vacant infill sites at densities to encourage development while respecting the character of surrounding uses.

Policy 8: Provide a diversity of community facilities to maintain and improve service levels for existing and future residents.

Program 8.2: Cooperate with the School District to enhance the quality of education, anticipate and construct school facilities as they become needed, and maximize joint use of school buildings and City parks and playgrounds.

Policy 9: Provide each major residential area with high quality neighborhood facilities including a park and other amenities, and encourage the location of an elementary school.

Program 9.1: Adopt specific plans for developing large landholdings to identify facility needs and establish development guidelines.

Policy 10: Preserve open space areas for the protection of public health and safety, the provision of recreational opportunities, use for agriculture and grazing, the production of natural resources, the preservation of wildlands, and the physical separation of Pleasanton from neighboring communities.

Program 10.1: Preserve open space by way of fee purchase, conservation and scenic easements, transfer of development rights, Williamson Act contracts, open space zoning categories, etc.

Program 11.4: Encourage lower intensity uses immediately inside the UGB, as necessary, to prevent potential land use conflicts with outlying non-urban uses.

Policy 12: Preserve scenic hillside and ridge views of the Pleasanton, Main, and Southeast Hills.

Program 13.7: Use design features in new development and redeveloped areas to encourage transit, bicycle, and pedestrian access, such as connections between activity centers and residential areas, and road design that accommodates transit vehicles.

Policy 17: Encourage development in locations which would complete or install planned public facility systems.

Program 17.2: Invest in public facilities and amenities that support the infill of development.

2. Circulation Element

Program 1.1: Require new developments to pay for their fair share of planned roadway improvement costs.

Program 1.2: Support the use of assessment districts to equitably spread the cost of new roadways and improvements and to facilitate installation of improvements prior to their being needed.

Program 3.3: Prohibit private access to major arterials.

Program 4.1: Provide setbacks, landscaping, soundwalls, and other methods to protect adjacent land uses from safety, noise, and air quality impacts associated with traffic on arterials.

Program 5.2: Provide more than one access road (including emergency vehicle routes) to new developments, and discourage cut-through traffic by appropriate use of traffic controls (e.g., cul-de-sacs, stop signs, landscaped barriers, etc.)

Program 5.3: Discourage the development of further gated communities which inhibit the sense of greater community and make City utility and emergency services more difficult to provide.

Program 5.5: Design new streets and alterations of existing streets to preserve the character and safety of existing residential neighborhoods.

Program 6.3: Separate vehicular, bicycle, and pedestrian traffic, whenever feasible, especially on routes to schools.

Program 6.4: Provide bike lanes on collector streets, where feasible.

Program 6.5: Particular sensitivity should be given to new development on streets which are projected to carry more than 2,000 average daily trips, and with existing houses which front such streets.

Program 6.7: Require the installation of bus turnouts and shelters along planned transit routes.

Policy 15: Create and maintain a safe, convenient, and effective bicycle system which encourages increased bicycle use.

Program 15.3: Integrate bicycle lanes or separate bikeways into street projects, wherever feasible.

Policy 16: Create and maintain a safe and convenient pedestrian system which encourages walking as an alternative to driving.

Program 16.1: Require developers to finance and install sidewalks and pedestrian pathways in future developments.

Program 16.2: Develop a pedestrian and equestrian trail system which connects all major portions of the Planning Area.

Program 16.3: Cooperate with East Bay Regional Parks District in completing a regional trail system and with Zone 7 in completing its Arroyo Management Plan.

3. Housing Element

Program 11.4: Use the Growth Management Program to ensure that residential development does not occur unless adequate infrastructure is present to ensure that the City's quality of life and level of services are maintained.

4. Public Safety Element

Policy 2: Investigate the potential for seismic hazards during the development review process, and implement soil engineering and construction standards which minimize potential danger from earthquakes.

Policy 5: Investigate the potential for geologic hazards as part of the development review process, and maintain this information for the public record.

Policy 6: Restrict new development of sites with structures intended for human occupancy in any landslide prone area and indicated as "Moderate" through "High" hazard for any geologic zone.

Program 8.2: Require new development to pay for fire safety improvement needs generated by the new development.

Policy 10: Strive to respond to all fire calls within five minutes.

Program 11.1: Require developers to finance and construct necessary water facilities for their projects when they develop.

Program 11.2: Require that all new developments be provided with sufficient fire flow facilities at the time of development at least at the level specified by the Fire Chief.

Policy 13: Require fire mitigation measures in new developments proposed, and require additional mitigation for those developments outside of the five-minute response time zones as determined by the Fire Chief.

Program 13.2: Require automatic fire sprinklers in all structures required in the Uniform Building Code in addition to all structures of 8,000 square feet and greater and all structures located in fire hazard areas.

Program 13.3: Ensure that all buildings be accessible to fire vehicles and fire fighting equipment.

Program 13.5: Require a greater degree of fire resistivity in roof covering for buildings within hazardous areas.

Program 13.8: Require fire breaks, green areas/"wetblankets," and/or greater building setbacks adjacent to unmaintained open space areas.

Policy 17: Ensure that hazardous materials and potential contamination are remediated prior to development.

Program 17.1: Require a site specific soils report for new development where there is a history of prior industrial or agricultural land use activities.

5. Public Facilities Element

Policy 1: Phase construction of permanent City sewer, water, and storm drainage improvements as a condition of new development to maintain City service standards.

Program 1.1: Coordinate developer financing with the City's Capital Improvement Program to ensure adequate capacity for future growth.

Policy 2: Secure sewage capacity through all available means for residential, commercial, and industrial development.

Program 2.1: Require new development to pay its fair share of the City's planned sewer system improvements including treatment, distribution, reuse, and export facilities.

Program 4.1: Require new development to pay for its fair share of the City's water system master plan improvements.

Program 4.4: Maintain water pressure at sufficient levels to serve residential, commercial, industrial, and fire flow requirements as determined by the City Engineer.

Program 4.5: Require the installation of water conservation devices and drought-tolerant landscaping in appropriate locations.

Program 5.1: Require new development to pay its fair share of the storm drainage system improvement costs.

Program 5.4: Require new development to improve local storm drainage systems to accept appropriate design year flows resulting from new development, as determined by the City Engineer.

Program 6.1: Require new development to pay its fair share of the flood control improvement costs included in Zone 7's Master Plan.

Program 6.2: Ensure that detention basins are designed to allow for public amenities, recreation, natural habitat, and agriculture, where feasible.

Program 8.2: Underground local serving electrical transmission and distribution lines in residential and commercial areas where feasible.

Program 8.5: Require new development to pay its fair share to underground distribution facilities fronting the development and total costs within the development.

Program 10.1: Work with the School District to locate school sites to preserve the quality of life of existing and new neighborhoods.

Program 10.2: Encourage limited elementary school enrollment size (up to 650 students) to maintain neighborhood character and promote more personalized education.

Program 17.4: Encourage the use of site planning and design techniques to minimize impacts to water quality, including minimizing land disturbance, minimizing impervious surfaces, clustering development, preserving open space, and maintaining riparian areas with buffer zones to reduce runoff into waterways.

6. Conservation and Open Space Element

Policy 1: Preserve and enhance natural wildlife habitats and wildlife corridors.

Program 1.3: Preserve and enhance the resource value of wetlands through project development design measures. These measures should be based in part on a jurisdictional wetlands delineation in accordance with current Army Corps of Engineers criteria, for projects which are known to have or that may have wetlands present within their boundaries.

Policy 2: Preserve heritage trees throughout the Planning Area.

Policy 3: Preserve and enhance stream beds and channels in a natural state, except where needed for flood and erosion control.

Program 3.4: Design projects adjacent to the arroyos to protect habitat areas.

Program 4.4: Preserve large blocks of open space land by encouraging the clustering of development.

Program 4.7: Develop zoning districts with open space uses appropriate for the adopted Open Space categories listed on the General Plan Map and which implement the policies and programs of the General Plan.

Program 4.8: Encourage public accessibility to appropriate open space land.

Policy 5: Preserve as permanent Open Space all areas of outstanding scenic qualities or areas which provide extraordinary views of natural and man-made objects.

Program 7.1: Ensure that Sand and Gravel Harvesting areas are reclaimed and reused according to the Specific Plan for the Livermore-Amador Valley Quarry Area Reclamation.

Program 7.2: Design developments adjacent to sand and gravel harvesting areas to include a protective buffer zone, similar to that on the east side of Martin Avenue, particularly north of Busch Road and along the Stoneridge Drive Specific Plan Area.

Program 8.4: Protect agricultural activities through the City Right-to-Farm Ordinance, and by creating buffer areas between agricultural and urban land to reduce potential use conflict.

Policy 9: Protect the quality and quantity of surface water and groundwater in the Planning Area.

Policy 10: Promote the conservation of water resources.

Policy 11: Provide sufficient parkland and recreation opportunities to accommodate existing and future needs of residents, workers, and visitors.

Program 11.7: Provide community parks with adequate parking facilities to the greatest extent possible.

Program 11.9: Pursue opportunities for joint use of City and school recreational facilities including sports fields and gymnasiums. Utilize school parking lots as much as possible to avoid impacts on neighborhoods.

Policy 12: Promote the development of bicycle, equestrian, and hiking trails throughout the Planning Area.

Program 12.1: Develop a system of bicycle, equestrian, and hiking trails in accordance with Figure III-9 of the Circulation Element.

Program 12.2: Promote the connection of public places through the extension of bike and pedestrian trails.

Program 12.5: Encourage developers to dedicate public access easements in private open space areas to facilitate the system of trails in Pleasanton as shown on Figure III-9 of the Circulation Element.

7. Noise Element

Policy 1: Require new projects to meet acceptable exterior noise level standards.

Program 1.1: Use the "normally acceptable" noise levels for new land uses as established in the "Noise and Land Use Compatibility Guidelines" contained in Table VIII-3, including the descriptions in the text.

Program 1.2: Use noise guidelines and contours to determine the need for noise studies and require new developments to conduct or pay for noise attenuation features as a condition of approving new projects.

Policy 3: Ensure that noise does not exceed interior noise levels of 45 L_{dn} for residential uses and those levels specified in noise studies for other uses.

Program 5.1: Locate noise-sensitive uses away from noise sources unless mitigation measures are included in development plans.

Program 7.1: Require earth berms, setbacks, sound walls, and other noise reduction techniques as conditions of development approval. Sound walls should be used only in cases where other techniques are not feasible.

8. Air Quality Element

Program 4.3: Encourage pedestrian-oriented developments which provide options for non-motorized transit to outside primary destination points such as parks, schools, and shopping centers.

9. Community Character Element

Program 8.2: Land use planning in areas adjacent to City entries should be particularly sensitive to aesthetic considerations.

Policy 16: Require the design of new residential development in hillside areas to complement the natural appearance of the open space.

Goal 6: To enhance the special visual quality of the Vineyard Avenue Corridor Area.

Policy 17: Preserve the natural appearance of hillsides, promote a wine country architectural and landscape design character, and enhance the natural riparian appearance along the Arroyo del Valle.

Program 17.1: Adopt design standards for the Vineyard Avenue Corridor Area.

10. Subregional Planning Element

Program 5.1: Actively support and participate in the South Livermore Valley Agricultural Land Trust.

Program 8.2: Strongly encourage the use of detention basins by developers to reduce peak stormwater runoff during statistically significant rainfall events, with a goal of no net peak flow runoff increase.

Program 9.4: Support the development of a subregional network of trails for bicycles, pedestrians, and equestrians.

B. SPECIFIC PLAN COMPLIANCE

Following adoption of this Specific Plan, no Planned Unit Development (PUD) development plan, subdivision, use permit, or other entitlement for use, and no public improvement shall be authorized for construction within the Plan Area which is not in substantial conformance with the Specific Plan.

C. PLANNED UNIT DEVELOPMENT ZONING COMPLIANCE

Specific Plan implementation requires the adoption of City Planned Unit Development (PUD) zoning for all land within the Plan Area. PUD zoning is necessary in order to ensure that the goals, policies, and programs of the General Plan and Specific Plan are effectively implemented while accommodating innovation and special consideration for site-specific constraints and opportunities.

Following City Council approval of the Specific Plan, the Plan Area will be "rezoned" to the following PUD Districts:

- PUD-MDR (Medium Density Residential)
- PUD-LDR (Low Density Residential)
- PUD-SRR (Semi-Rural Residential)
- PUD-HR (Hillside Residential)
- PUD-OS (Open Space)
- PUD-V (Vineyard)
- PUD-CP (Community Park)
- PUD-PI (Public and Institutional - Elementary School)

D. GROWTH MANAGEMENT PROGRAM COMPLIANCE

All residential development within the Specific Plan Area shall be subject to growth management approval in accordance with the City's Growth Management Ordinance.

E. ALAMEDA COUNTY GENERAL PLAN

Three Alameda County General Plan policies and one goal relate directly to the Specific Plan. These call for the protection of the County agricultural and quarry lands lying beyond the Specific Plan Area, and read as follows:

Policy 77: The County shall require buffers between those areas designated for agricultural use and new non-agricultural uses within agricultural areas or abutting lots. The size, configuration, and design of buffers shall be determined based on the characteristics of the project site and the intensity of the adjacent agricultural uses, and if applicable, the anticipated timing of future urbanization of adjacent agricultural land where such agricultural land is included in a phased growth plan. The buffer shall be located on the lot for which a permit is sought and shall provide for the protection of the maximum amount of arable, pasture, and grazing land feasible.

Policy 78: The County shall require that, where conflicts between a new use and existing use are anticipated, the burden of mitigating the conflicts be the responsibility of the new use.

Policy 79: The County shall enforce the provisions of the Alameda County Right-to-Farm Ordinance on all lands within and adjacent to agricultural areas.

Goal (Quarries and Regionally Significant Aggregate Resource Areas): To recognize the regional value of the County's construction aggregate resources and to ensure compatibility between quarry operations and surrounding land uses.

F. UNITED STATES ARMY CORPS OF ENGINEERS

The United States Army Corps of Engineers (Corps) may assert jurisdiction for drainage, bridge, and road improvements within the Specific Plan Area under the authority of Section 404 of the Clean Water Act. The Corps' jurisdiction over non-tidal waters extends to the "ordinary high water mark" of creeks, streams, and rivers, plus possible adjacent wetland areas. Wetlands are defined for regulatory purposes as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include swamps, marshes, bogs, and similar areas.

The Corps shall be consulted prior to any construction activity within the jurisdictional limits of wetlands or within the bed and bank of any "waters of the United States." Corps involvement in the Specific Plan Area will be determined based upon its discretion regarding the total acreage of "waters of the United States" and wetlands proposed for development improvements.

G. CALIFORNIA DEPARTMENT OF FISH AND GAME

The State Department of Fish and Game regulates activities that affect streambeds and other wetland areas in California. The Project developers shall consult with the State Department of Fish and Game and obtain a 1601 Streambed Alteration Agreement, if applicable, before any construction work begins that will affect streambeds or other wetlands under the jurisdiction of the Department. This shall include creek channel improvements, road construction near creeks, bridges, etc.

H. REGIONAL WATER QUALITY CONTROL BOARD

The discharge of storm water from detention basins may require a permit from the Regional Water Quality Control Board. The developers of projects containing detention basins shall consult with the Board and, if necessary, obtain a permit prior to construction or restoration of detention basins.

U.C. BERKELEY LIBRARIES



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